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On the cover...

Closed-circuit television in action at the University of Akron. See story on page 21.

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Programing Music on an Educational Radio Station

"Disc jockeying" not enough

The day has long since passed when it was necessary to defend the importance of music as a cultural factor in the lives of the people. Approximately sixty per cent of radio time on the average is devoted to music. In many cases the percentage reaches eighty.

In dealing with music programing, then, we are dealing, in terms of time at least, with the most important single factor of a station's air time, but meanwhile admitting the importance of programs in many other areas.

It would be well to assume that, in this day and age, with a strong bid for audience being made by commercial "good music" stations, educational stations can no longer justify music programing which does nothing more than train students to become disc jockeys when they graduate. We may also assume that although studies of an individual station's potential audience may indicate the desirability of some popular music programs, these instances are becoming increasingly rare, and the emphasis must be placed on the best "classical" music, interspersed with varying amounts of good folk music, jazz, or "light concert" music.

This brings us to a preliminary point in our discussion—the subject of a trained music director.

By **Harry B. Welliver**

Music director, University of Michigan broadcasting service.

It would appear rather obvious from the evidence that the importance of music being what it is, stations should employ a competent, trained music director whose job it would be to supervise the musical life of the station.

Educational radio justifies its existence almost completely on the basis of the service it renders. There are no gimmicks, no prizes to offer, simply "straight" radio. This is a real disadvantage because it means we have only one way to attract and hold listeners—good programing. At the same time it is a great asset because it leaves us free to range the whole wide field of music literature,

which is to say we have limitless programing possibilities.

Our stations are educational, nonprofit, but they cannot afford to be nonlistener. Thus music programs must be designed to hold a given audience, attract new listeners, and leave the listeners satisfied. New listeners most likely can be attracted by various nonbroadcast promotional activities. But to make this possible the music department is responsible for the selection of a good program title, one that is intriguing and easy to remember, and for supplying for publication in the station bulletin or local press a rather complete listing of the content of each program - with the composer and title of each work on a given program as a minimum. (Some stations add performing artists, and the most elaborate bulletins contain the name of the manufacturer and number of the recording used.)

Once the audience has been induced to tune in, the responsibility for holding it rests heavily upon the program builder. In approaching his task, he is guided by certain practical considerations and certain aesthetic principles. His own experience and ingenuity are also called into play, but there are virtually no rules. Successful programs have been built in almost every conceivable way, using almost every imaginable kind and combination of materials. The first practical consideration is that competition must be met. Program building will be influenced by the character of the rival programs or stations. No two stations, probably, have the same local or listening-area situation. Stations in or near metropolitan areas are faced with competition from well-financed commercial AM and, especially, FM stations programing the very best in music and attracting the finest talent. Stations in other areas do not usually face this type of competition. A good program director will attempt to determine the situation he faces, make a careful study of programs of the stations with which he competes and from that, attempt to plan a program which will be as competitive as possible.

The second practical consideration revolves around station policy. If station policy calls for a wide use of radio for educational projects, the music director's responsibility grows. Again, it may call for one or a combination of different program types. Generally, music programing may be divided into three main categories. First we have what we might call "exposure music." This type of program might be characterized by the use of a "you-have-now-heard ...you-will-now-hear" type of script, amounting to nothing more, actually, than a label-reading technique. This variety of program has no particular educational or aesthetic ax to grind. Its main purpose is to supply good music listening. Lest someone think otherwise, it should be pointed out that even this type of program must be carefully planned with due regard to certain accepted aesthetic and musical principles.

A second category might be identified as "in-school listening" programs. This includes programs written especially for use in schools and for which the station may or may not have prepared student books, teachers' guides, and possibly even actual classroom assistance by means of periodic visits by station personnel. These classroom programs may be designed for instruction in singing, instruments, or music appreciation.

Finally, we have the scripted program in which musical works are introduced by a short paragraph or two giving interesting information about the work to be performed and/or the artists involved. If properly handled, this type of program is probably the most effective. First of all, it gives the nonprofessional listener, the bulk of the audience, information which will presumably enhance his listening pleasure and satisfy his desire to learn more about music, but, on the other hand, it will probably not be offensive to the professional listener whose only desire is to get on with the music!

Many stations have been successful with an out-and-out music appreciation program beamed to adult listeners. Its avowed purpose is to dissect, as it were, a particular composition chosen for the day's broadcast. Produced for the nonprofessional who is seriously interested in music as a nonprofessional, such a program can be tremendously interesting and attract large listening audiences. It should contain a maximum of information and a minimum of pontification. It requires careful planning and demands expert handling and tactful presentation. Actually, it calls for a genuine "radio personality," and these are rare birds!

The final practical consideration for good music programing concerns resources available to the music director. He must have a good record budget so that the record collection can be kept abreast of new recordings and new artists. He must have good library facilities for storage, cataloging, and programing, and ample assistance for this work. His budget should include adequate funds for engineering services on live and delayed broadcasts.

In the larger college and university communities, especially where significant musical establishments are maintained, it is often possible to embellish station offerings with live broadcasts from college concert halls as well as from station studios. College groups, and very frequently visitors to the campus, often welcome and are available for live or delayed broadcasts. Such events set a station apart from the commercial AM-FM station, and though few in number, they are an important part of good music programing.

Assuming that a reasonable number of the practical considerations can be met, how do we go about achieving a successful music program? From the standpoint of a successful music programing process, the most important consideration is probably the aesthetic. Yet it is the most difficult to deal with. Generally, we might say that the principles of good program planning for radio parallel rather significantly the principles of good music programing anywhere. A station program should have variety. This should probably be looked at in large blocks of time—a month, two months, three months —rather than on a daily basis alone. (Some stations make studied efforts not to repeat a composition within a six-month period.)

Variety may be achieved in a number of ways. There should be a sensitive balance between the music of the various generally accepted epochs in music history, with due consideration for the probable taste of the listening audience as determined by sucessful programing in the area by visiting artists, record sales, and other means. Just as areas in the country vary in their tastes in art, architecture, and clothing, so they vary in their tastes for music.

Admittedly, this is a rather difficult matter for a station to determine, but some attempt should be made at it. Likewise, there should also be a good balance between mediums of performance. Overemphasis in any area is bound to be bad. Daily programs of piano music, vocal solos, and symphonic music would probably be quite acceptable. But whether the same could be said of music for the harpsichord, viols, or oboe is another matter. Again, however, the taste of the local area is of paramount importance.

Furthermore, within a given program, careful thought should be given to the order in which positions are presented. Some programs arrange works in chronological order, without too much regard to other factors. Other progams seek to attain variety by arranging works so that the mood of the music and the historical period are elements of pleasant contrast. What may be good for the concert stage may not necessarily be good radio. If for a moment interest lags, the radio listener can flip a switch or turn a dial. This gives added pause to radio programing. One school of thought believes that good music programing for radio begins with a relatively short, brilliant composition and ends approximately in the same manner. This is thought to put the listener in a frame of mind to continue his listening as the program begins and at the end to leave him with a good impression of the program as a whole. In between, the program should be so contrived as to give reasonable assurance of listener interest.

Finally, there have been many successful programs built around a central theme or idea. We might devote a given evening each week over a period of months to the symphonic works of a certain composer, and perhaps this may be done to celebrate the centenary of that composer's birth or death.

We might contrive a series of programs featuring an outstanding artist on the campus or highlight a significant musical organization with a series of programs. One night each week might be devoted to a complete opera. The station music director, trained as a professional performer with a solid concentration in musicology, should certainly never lack ideas for programing. He will always lack time in which to carry out all his ideas, but some of them will materialize by and by.

In conclusion, good music programing, consuming as it does as much as eighty per cent of the broadcast day, is the heart of station programing. As such, it deserves the services of a trained musician and the assistants necessary to do the job well. The opportunities for good music programing are virtually limitless. However, the job of music programing is not easy because of the diversity of a station audience and the keen competition for the listener; because the music director must work within the framework of a definite station policy; and because the director is definitely limited by the resources at his command.

A Telephone Survey

Farm program popularity measured in Alabama

By **John W. Dunlop**

Program director, Auburn Television, Auburn University, Auburn, Alabama.

At least 126,304 families view one or more programs each week on the Alabama Educational Television Network.[1] A third of this group regularly views **Alabama Farm Facts.**[2] True or false? A recent systematic telephone survey in Alabama, conducted by the educational television department of Auburn University revealed these and other facts.

We went about our first and only phone survey this way. Through the cooperation of the agricultural extension service we contacted the county agents in the forty-five counties in which the AETN provides excellent coverage. A letter explaining our purpose (number of ETV viewers, consistency of viewing, and specific information about **Alabama Farm Facts)** went forth from Bill Smith, survey supervisor, to the agents with instructions for conducting the survey as well as questionnaires. A letter from the director of extension to the agents stressed the importance of the survey and the necessity of adhering to the instructions.

The secretary to the individual county agent was to serve as the interviewer. The interviewer called two homes each day February 13 through February 17, 1961, for a total of ten calls in each county. The calls were made while the farm program was on the air from Auburn, permitting fifteen minutes for the completion of two interviews. Names were selected at random from the most-used directory in the office of the county agent. The first call on Monday in one-half of the counties was placed to the fifth name in the directory under A, in the other half under Z. If no answer, the interviewer was instructed to try the next name listed. The second call was to the fifth name under B or Y, and on the second day the interviewers moved on to the C and D listings and the W and X listings. And so it went: two calls per day in each of forty-five counties for five days.

1 WAIQ-Channel 2-Andalusia; WBIQ-Channel 10-Birmingham; WCIQ-Channel 7-Mt. Cheaha.
2 12:45-1:00 Mon. thru Fri., general farm and consumer information.

The most valuable thing learned is to test our questionnaires in the future prior to putting them to use in a survey. We asked eight questions. Two proved to be of little or no value. "What is your occupation?" and "Do you live in a city, in a small town, or on a farm?" are obviously weak questions. A slight improvement might be: "What is the occupation of the principal wage earner?" and "Do you live in a town with a population of 12,000 or more, less than 12,000 or in a rural area?" Still pretty sad.

INTERVIEWEE

Name _____
Address _____
Telephone _____

INTERVIEWER

Name _____
Date of Call _____
Time of Call _____

Hello, is this the _____ residence?

1. This is Auburn Television survey calling. We would like to know if you watch Educational Television. Yes _____, No _____.
   (If **no**, ask questions 7 and 8—if **yes**, ask:)

2. How regularly do you watch Educational Television?
   _____ Every day
   _____ Several times a week
   _____ Once a week (Once-in-a-while)
   _____ Once every other week
   _____ Seldom

3. Have you ever watched "Alabama Farm Facts" on ETV. Yes _____, No _____.
   (If **no**, ask questions 7 and 8—if **Yes**, ask:)

4. Are you watching this program now? Yes _____. No _____.

5. How regularly do you watch "Alabama Farm Facts"
   _____ Every day
   _____ Several times a week
   _____ Once a week (Once-in-a-while)
   _____ Once every other week
   _____ Seldom

6. Did you find the information which is offered on the program to be helpful and of interest to you?
   Yes _____, No _____, Somewhat _____.
   Now I have just two more questions.

7. Do you live in the city _____, in a small town _____, or on a farm _____.

8. What is your occupation please? _____

Thank you Mr. _____. You've been very helpful. Goodby.

Male _____
Female _____
REMARKS _____

_____

Here is what we learned. Thirty-nine per cent of those surveyed watch programs on the AETN, either seldom or more frequently. Of this "yes" group, 66.67 per cent view programs on the AETN at least once a week. Applying this percentage to the ARB [3] TV-homes figures for the counties surveyed we come up with some 126,304 Alabama homes regularly viewing educational television.

"Have you ever watched **Alabama Farm Facts** on ETV?" Of those who do watch ETV, 37 per cent said "yes." Of that group of 70,000 homes, 63.5 per cent view the program at least once a week. This consistent viewing group represents 44,450 TV homes.

Of those surveyed who view **Alabama Farm Facts**, 80 per cent found the information offered on the program "to be helpful and of interest" to them.

Of those surveyed, the greatest percentage were farmers; the majority of the remainder surveyed fell in the following occupation groups . . . retired persons, retail store employees or owners, teachers, postal employees, lumber workers, construction workers, secretaries, steel workers, textile workers, and salesmen.

Of those surveyed, 44 per cent considered their residences to be in "large towns or cities," 32 per cent indicated they live in small towns or suburban areas, the remainder in rural areas or on farms.

"Why don't you watch ETV?" Poor reception was the most important single reason for not viewing.

When given a chance to comment, what did some of the persons interviewed volunteer?

- "I feel that I have learned something worthwhile each time I watch educational television."
- "No, I don't. I look at 'As The World Turns' at this time of day and at 'The Edge of Night' later on."
- "We try to watch our favorites every week."
- "Since our children began watching ETV in school, other members of our family started watching several times a week at home."
- "The reception is so poor I seldom watch."

No one asked, "What's educational television?"

In most states there are county agent offices which can serve to varying degrees in the making of surveys. In Alabama they have traditionally been promoting ETV programs of potential interest to the farm population. The survey results, when made available to them, may serve to effect a still greater effort on their part to propagandize the cause.

3 American Research Bureau, Inc.—June, 1960.

Inter-Continental Classrooms

Children of U.S. personnel overseas learn by radio

By **Don A. Nolder** and **James A. Fellows**

Mr. Nolder is audio-visual specialist in the Headquarters of the U. S. Army Dependents' Education group, Karlsruhe, Germany. Mr. Fellows is executive secretary, Empire State FM School of the Air.

Educational radio programs have recently been introduced into the U.S. Army dependents' schools in Europe. The programs are made available through the facilities of the American Forces Network.

Most Americans are entirely unaware of the vast American school system which lies outside the United States. It is the ninth largest American school system and is a unique system of world-wide American government-operated schools.

There exists an important need to provide educational facilities for more than 130,000 school-age children of U. S. Army, Navy, Air Force, and civilian personnel stationed in France, Germany, Italy, North Africa, Spain, England, Iceland, Turkey, Japan, Korea, Okinawa, the Azores, and other areas throughout the world. It is the enrollments of all these schools which combined rank this system of American education as the ninth largest, if somewhat scattered, American school system. Largest among these various centrally operated government school systems is the US Army Dependents' Schools in Europe.

With central administrative offices located near the Rhine River in Karlsruhe, Germany, the US Army Dependents' Education Group directs and services 21 high schools, each accredited by the North Central Association of Secondary Schools and Colleges, 22 junior high schools, and 98 elementary schools located throughout France, Germany, Italy, and in Ethiopia. These schools provide educational facilities for approximately 60,000 (excluding kindergarten) of American military and civilian personnel located anywhere between Berlin to the east and La Baule, France, to the west, and

Bremerhaven to the north to Addis Ababa in the south. Many of the schools have well over 1,000 pupils. A large number of the schools are located in such cities as Frankfurt, Munich, Heidelberg, Nuremberg, Paris, Orleans, and Vicenza, while others are located in smaller communities spread across the European countryside. Planning adequate programs and staffing of schools, in addition to classroom construction, have been major tasks for all civilian and military administrators because enrollments have doubled in the last five years.

About three thousand teachers recruited in the United States, all with a minimum of two years of teaching experience, are currently assigned to these schools. Certain instructional advantages which are open to these schools are wisely used. For example, about 500 locally hired host-nation teachers provide daily host-nation foreign language instruction for grades 1-12, in every school.

MATERIALS AND SERVICES

A person touring the dependents' schools would find very little difference between well-equipped schools in the United States and those he was visiting in Europe. All are equipped with modern American textbooks with a wide variety of instructional materials such as maps, globes, films, filmstrips, science laboratories, and recording equipment.

Two of the educational radio programs now in use are supplied by the Empire State FM School of the Air, a privately organized educational broadcasting group in New York State. One program, featuring a storyteller with programs for primary grades, has been widely accepted in the elementary schools. A second, **Science at Our Door**, produced by the New York City Public Schools and released through the School of the Air, has provided rich suggestions for experimentation on scientific phenomena from magnetism to sound vibrations.

You Are There, a series originally broadcast by the CBS Radio Network is presented for intermediate, junior, and senior social studies classes. Through an on-the-spot reporting technique, the events and their personalities are brought to life with significance and color.

Jeffersonian Heritage, a program released by the National Association of Educational Broadcasters, features Claude Raines who portrays Thomas Jefferson during the birth of the American republic.

Image Russia, which consists of 26 half-hour programs originally produced by NBC are suitable not only for the study of political societies, but for music and literature classes. A second NBC program, **Conversation**, discusses a wide variety of current topics, each different and helpful in stimulating class discussion before and after the broadcast.

Classroom response has been so enthusiastic that a large number of the schools are tape recording many of the daily programs in order to use them again and in addition, to build a school instructional tape library. "These programs are providing our students and teachers with excellent material that would otherwise be unobtainable," says one principal from an army school near the East German border. "The radio is one of our strongest teaching aids."

U.S. TV Production Design

An abstract of an article in the EBU Review, November, 1960

(The opening portion of the original article began with a description of the structure of television in the United States: the commercial stations, both network and independent, and the educational stations. It then went on to explain the differences between the budgets and available personnel in the design departments of network originating stations and educational stations. These differences would obviously affect the scenic design and execution, as would the various types of programs for which the designs might be intended.)

While the types of television programs produced in the United States could be classified in a number of different ways, in commercial stations we find four general types. Under News and Public Affairs (approximately 10% of network programing) we include news, weather information, religious programs, talks of all types, interviews with prominent national figures, special events, and network educational programs.

Under Variety and Music Programs (approximately 30% of network programing) we include variety, opera, musical comedy and operetta, quiz, audience participation and panel, dance, and nondramatic "specials" usually built around a single dancing or singing star.

By **Edward Stasheff** and **Verne Weber**

Respectively, professor of speech, University of Michigan, and TV coordinator, Eastern Michigan University.

Under Drama (approximately 55%) we include drama written for television and either produced live or recorded by TV methods (kinescope or videotape recording); drama filmed expressly for showing on television stations; films, originally produced to be shown in motion picture theaters, but now released for showing on television. While the 55% mentioned above includes all three types, for the purposes of this article we have limited ourselves to the design and production techniques involved in the live or television recording group. It

should be noted, however, that **live** drama will comprise 5%, at most, of the dramatic offerings of the networks in the current season.

The Sports category (approximately 5%) is produced almost entirely at the scene of the sport, and thus does not affect design materially, although it has its own special production problems.

Educational stations occasionally produce dramas, operas, ballets, and orchestral programs, but their principal efforts are directed toward educational and informational programing.

In short, trends in design are influenced by such factors as the type of program for which the set is planned and its intended audience; whether the setting is to be used only once or for a continuing series; whether the program is supported by a commercial sponsor or produced at the expense of the station or network. None of the above dictates the style of the design, which may be realistic or abstract, for example; each program or series is produced in the style which will provide the best visual support.

The more familiar types of design are those used in drama, opera, and ballet. These may be realistic, stylized, or abstract.

Less familiar, and less indebted to design for the theater, is the type of production used in the other kinds of programing. Nondramatic programs are much more likely to use the same setting week after week. We refer to those sets which do not pretend to be a room or a place, but are frankly set in a television studio, as "studio backgrounds." These need not be bare or dull; they are usually attractive and carefully designed to make possible and convenient those camera shots which the particular continuing series uses again and again.

It may be more profitable to classify our production styles not as **realistic, stylized,** or **abstract,** but as **realistic, decorative,** or **functional.** Although one feeling predominates, in most designs, elements of all three may exist in a single setting. For example, in one long-running panel program, the furniture is realistic, the wall surfaces are treated purely as decoration, and the arrangement of platforms and steps of varied height is purely functional, and designed in terms of camera angles and subject movement (**To Tell the Truth, CBS**).

We have not been able to identify a single philosophy of design and production in United States television. To begin with, there are the obvious differences between the commercial network stations at which most of live television originates, and the independent commercial and the educational stations. Even if we concentrate on the national network level, however, it is hard to discern a common approach to the assignment of designers to programs. The 58B issue of the **EBU Review** (on British Design) describes the BBC policy of encouraging or developing specialists who have talents related to the particular kind of program to which they are assigned. On the other hand, the 62B issue (on Italian Design) speaks with equal eloquence and justification of an emphasis laid not so much on the out-and-out specialization of the designer for a single type of program, but rather on each designer's cultivating a particular style.

Network design departments in this country encompass both types of designers, probably with a greater proportion of generalists than specialists. On the educational or independent station level, of course, only the generalist can

meet the many and varied demands which are made upon him.

Although a man assigned to design studio backgrounds can handle more programs than one assigned to a drama, good design is an important factor in the success of both types of program. While a dramatic series or an individual drama will require more research, more development of detail, more investment of time than a quiz, audience participation, or panel type of program, the latter type still demands ingenuity and good design sense, if the setting is not to lose its initial attractiveness from continuing exposure, week after week. Moreover, a studio background for a nondramatic program may require even more awareness of the demands of television if the setting is to meet the needs of the director.

Network designers in the United States must contend with another factor which is not present in European television. This is the influence of the advertiser or his agency on all aspects of production. Since the advertiser is paying all production costs, he and his representatives may often influence the choice of members of the production team, and their tastes may dictate the types and styles of the visual elements of the program (as well as others.)

For purposes of this discussion, we should like to divide television graphic design into two types: identificational and informational.

Identificational designs include program or series titles, credits, advertiser identification, and station or network identification.

Informational graphics convey more than recognition of a familiar series or advertiser, or the name of a drama and its author. Such materials as graphs, charts and maps, whether still or semi-animated, are necessary components of the program's content and may, for brief periods of time, provide the principal content as well as visual support.

While identificational or title art almost always fills the screen and exists in a different realm of reality from that of the studio action, informational art more often appears in the studio along with the performer or presenter. It becomes to the nondramatic television performer what hand properties are to the dramatic actor.

New methods of visualizing information are constantly sought for, to maintain the viewer's interest in the material being presented, and to make **visual** those concepts and facts which are not innately so. In educational stations, particularly, considerable ingenuity is expended to effect two economies: 1) economy of cost, and 2) economy of effort by the performer. Hours spent in the design and construction of the graphic device may save precious minutes of air time as the program is presented.

In the opinion of the authors, graphic materials are most effective when operated by the performer himself, since this achieves a better integration of the graphic into the program content.

The use of projected scenic backgrounds brings us back to the category of settings rather than of graphic design. In commercial television, on the network level, this approach to scenic design may be found in the programs themselves, principally in drama and variety programs, while the independent commercial station uses it almost exclusively as background for advertising messages.

Educational television stations use rear-screen projection in either of two ways: 1) as scenery,

whether as the whole back wall of a set, or as the background seen through a window, attempting in either of the above to make the projection as illusionary as possible, or 2) as **obvious** projection, for symbolic or informational purposes, with no attempt to conceal the use of projected images, and with dimensions that vary from miniature to twice life size.

Another device, one that is used primarily for decorative purposes, rather than for conveying information, is that of projected light patterns. They may suggest anything from venetian blinds or prison bars to a purely decorative pattern of light and shade. An economical scenic device, this technique may be used as a principal decorative element in an educational program with a low budget, or as a complementary element in a more elaborate production on the network level. Those designers who like to use it claim for it the advantage of economy of time as well as cost.

It may be that the alacrity with which new developments (mechanical, optical, and electronic) are seized upon by designers in the United States arises from the nature of television broadcasting in this country and the audience thus created. The multiplicity of channels and the many hours of available programing have created an appetite which television is hard put to satisfy. The appetite of the television audience is omnivorous, yet easily jaded; good visual variety, good pictorial design, creative imagination are all important in meeting and satisfying, without sating, this demand.

It is perhaps belaboring the obvious to say yet again that television is a visual medium, and that design cannot be confined to backgrounds. It is more than a mounting for content; it is an integral part of the communication, whether transmitting entertainment or information. We emphasize the importance of the designer to the production team, and the present-day acceptance and recognition of his contribution to any successful television presentation.

Operation Alphabet

TV helps illiterates in cooperative venture

"God bless you for **Operation Alphabet.** My husband is handsome, with a fine personality. He can get a job anywhere. But as soon as his boss finds out he can't read or write, he's fired. These TV lessons are a blessing from Heaven."

"My grandsons, 20 and 21 years old, were raised in the South. They left school at the third grade. Now they are learning to read and write, thanks to **Operation Alphabet!** Thank you - Thank you."

"My mother is 71 years old. She came here from Germany. She has been trying to learn English but nothing has helped her as much as **Operation Alphabet.** She never misses a lesson. It's wonderful."

"A group of illiterate inmates at the prison have completed your entire course. They have learned enough to pass the test and receive a certificate. This is a real public service."

These are but a few of thousands of letters received in response to **Operation Alphabet,** a TV series of one hundred 30-minute lessons presented five days a week from 6:30 to 7:00 a.m. from January 30 until June 16, 1961, on time donated by Station WFIL-TV in Philadelphia. The project represents several years of cooperative planning to answer a community need. Many individuals from a wide variety of organizations joined resources. The results have been overwhelmingly favorable; the heart-warming satisfactions more than compensate for the endless hours of painstaking effort.

By **Martha A. Gable**

Director of radio and television for the Philadelphia Public Schools.

Let's begin at the beginning. In the spring of 1958, Mrs. Loretta Warlow and William Powell of the Greater Philadelphia Council of Churches became aware through their social service and church affiliations that illiteracy was becoming a problem in the Philadelphia area due to an increasing flow of migrant population. Mrs. Warlow and Mr. Powell interested Nathan Feinstein of the Junior Chamber of Commerce; Robert Coates, director of the Division of School Extension of the Philadelphia Public Schools; George Koehler, manager of Station WFIL-TV;

and me. Census figures of the migrant population within range of the Philadelphia station were studied. In September, 1959, it was estimated that a potential of 200,000 individuals might benefit from such a series; project planning began.

An advisory committee of forty-five leading business, health, service, and civic leaders was organized.

Richard Bennett, representing the Philadelphia Foundation, allocated $4,000 to cover printing and publicity.

Dr. Alexander Shevlin, a member of the radio-TV staff of the Philadelphia Public Schools, and a former high school English teacher, was selected as the TV teacher. Dr. Shevlin has had unusual success with an adult education TV series entitled "Practical English" and served for many years in the public adult evening schools.

Two aspects of preparation were undertaken at the same time: the planning of content and sequence of lessons in a course of study, and the promotional campaign through every possible means to reach the illiterates and to persuade them to use the programs.

A committee to develop curriculum met weekly throughout the year for three and four hours. The diversified backgrounds of these individuals are interesting. Ethel Amatneek and Estelle Leberman are experienced in teaching English and citizenship to foreign-born adults; Eleanor Oberman teaches English and citizenship to foreign-born children and adults; Elizabeth McCabe teaches illiterates—children in day school and adults at night; William Ross was a teacher of illiterates in the armed forces and now teaches such classes in night school; Virginia Sheller is a TV teacher of language arts for elementary grades and formerly was a demonstration teacher of beginning reading; Richard Hanusey is an elementary school principal; Eleanor Sandstrom is an expert in the teaching of foreign languages at the high school level.

These individuals, with the TV teacher, produced a workbook which was made available for $3.50, or 25 lessons at a time for $1.00.

In the meantime, a carefully planned campaign was undertaken to get the message of **Operation Alphabet** to the illiterates in a friendly, personal manner, which respected the natural reticence of adults to admit such an inadequacy. Handbills were printed, newspaper ads appeared in donated space, letters were sent home by pupils. In each case, the reader was urged to use great tact in transmitting the information to illiterates in his home, in his neighborhood, at his place of work.

In a number of communities, efforts were made to set up viewing centers, with leaders to help the viewers. However, as was anticipated, few adults wished to expose their illiteracy to others. Even the lowest-income homes have TV sets which served the purpose.

Appeals were made through social service agencies, hospital clinics, visiting nurses, parents' associations of the Philadelphia Home and School Council, suburban PTA's, AAUW branches, Federation of Women's Clubs, AFL-CIO groups, Kiwanis, Rotary, Lions, and other service clubs to consider ways to "get through" to those who needed the program.

These same groups advised the committee that the early hour—before going to work—was best.

After the first twenty lessons, it became apparent that **Operation**

Alphabet was achieving its mission, far beyond expectations. A constant stream of individuals arrived at the Board of Education to purchase workbooks; they usually stated that the books were "for somebody else." No questions were asked. Every effort was made to protect the identity of the "pupils."

Many books were requested by mail. When it was learned that a needy person was unable to buy the books, the Philadelphia Foundation provided the funds. Some 4,000 workbooks were distributed.

In response to a suggestion made a few times on the TV program that contributions be sent to help pay for workbooks, $1,000 was contributed—voluntarily—with no pressure.

At the seventy-fifth lesson, the viewers were asked to use a lined page provided in the workbook to write a letter; 2,500 letters were received, corrected, and returned.

Not only illiterate adults used the programs. Teachers of elementary and secondary grades wrote for materials and said that their pupils were benefiting from the lessons. Parents stated that their pre-school children were learning rapidly to read and write.

Foreign-born adults who knew some English wrote that they "learned more words" from the TV series.

A number of adults attending citizenship classes augmented their learning by viewing the TV series. They reported regularly to their teachers, mentioned previously as members of the committee. This provided a continuing evaluation of pace, content, and progress.

It is estimated that between 50,000 and 75,000 individuals were benefited by the course.

Heartstrings were tugged when letters such as these arrived:

"I went to hospital. I could read xray, clinic, and other words. It made me feel good."

"Our son is 27 years old and is retarded. He has been to many clinics and schools. **Operation Alphabet** is the first ray of hope. Our son is able to do this work by himself. We are amazed by his progress. We wish you would come to see for yourself our son's progress."

At the end of the course, in June, a test was offered to those who requested it. For those who took the test, certificates were sent. Already 1,000 requests have been received - and at this writing they are pouring in every day.

"Operation Alphabet" will be resumed beginning January 29 for one hundred lessons.

Probably the most exciting aspect of **Operation Alphabet** is its pattern of teamwork among so many—a remarkable combination of people who contributed regardless of economic level, religion, age, race, vocation, plus the generosity of a commercial station—to serve a need of human beings. It is an example of the highest type of public service.

Is TV Accessible?

Author compares etv and motion pictures for learning

By **Louis Forsdale**

Professor of English and principal investigator for the Project in Educational Communication, Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University.

One important criterion to consider in assessing the value of a medium which is used for formal educational purposes is the accessibility of its materials to the learner. Of any educational medium one may properly ask the question: Can the learner use its products when he wants, in a place convenient to him, and as many times as he wishes?

Or, to place the focus once removed from the learner: Can the student's teacher bring these materials to a class when he wants to, repeatedly if desirable? But concentrating on availability to the student places a more rigorous requirement on the medium, a requirement which in the long haul we ought to fulfill.

A convenient tool in thinking about this idea is the "A Line," or Accessibility Line. In your imagination, construct a horizontal line and let the right end represent the educational media whose products the learner has ready access to when he wants them. Let the left end stand for media whose products are not available to the learner on demand, because of technical or economic problems. Along this line, placed appropriately between these two poles, you can distribute all media which are used in education.

At the right end, where accessibility to the learner is greatest, one would place the book, for this durable, portable, inexpensive medium which requires no machinery for read-out of messages, makes materials physically available to the user perhaps more readily than any other communication tool. (Except for those notoriously critical moments just before college examinations!) This is not to imply that the book is therefore in all ways a superior educational medium, for print symbolism, although accessible, is demonstrably inferior in other ways to such media as film and television.

Among media requiring equipment, the disc recording falls fairly near the right end of the "A Line" because discs are frequently stored for use in school libraries and the equipment is easily operated by students, even young ones. On the other hand, the disc is not quite so accessible as the book.

The new teaching or learning machines will also fall near the right end of the line if the hardware is simple and inexpensive enough, and if there are enough programs to feed the machines. And well they should meet the criterion of accessibility, for they are designed precisely to serve the individual self-directed student.

Without attempting to list exhaustively all media which fall at or near the right end of the scale, let us turn to the left end, and consider the media whose products are not randomly accessible to the learner. Television falls at the far left of the "A line," for availability of programs in broadcast TV is controlled at the point of production, not at the point of reception. The student cannot select from among the full range of past and present programs the one which he would like to see now, a situation dictated by present technical and economic limitations.

The educational motion picture falls somewhere to the left of center of the "A Line." As matters stand, the student cannot necessarily get a film when he would benefit most from studying it. In most schools his teacher orders the film in advance from a central film library, an arrangement dictated primarily by the cost of prints. When the film arrives it cannot be shown without using a complicated projector in a darkened room. The young child cannot project the film himself, of course, as he might play a phonograph record or study a filmstrip at home on a personal viewer, although older children sometimes are permitted to. Finally, the average film must be returned on schedule, so it, like the television program is, in effect, transitory. Where films are owned by individual schools, accessibility is enhanced, although the projection equipment remains complicated.

What should one conclude, seeing various media strung out on the accessibility clothesline? At least this: Both television and film, those media which we use to package and distribute moving images with sound, have major weaknesses which we must overcome. **For any medium by which packaged educational materials are presented to students is deficient to the extent that those materials are not available to the learner on demand.** (Not **useless**, but **deficient.**) Live presentations are a different matter, for by definition, they are accessible only at the moment. But with canned materials, we should never lose sight of the desirability of moving them toward the right end of the "A Line." This should be a major technological and economic goal.

The accessibility problem is recognized by students of both television and film. Apparently both can be pushed toward the right of the "A Line," eventually. In the near future, however, for both technical and economic reasons, the prospects seem to favor film heavily. This raises serious questions about the wisdom of committing oneself to television as a means of distributing moving images with sound for in-school uses.

The technical problem facing television in this context is well known to be that of developing simple and inexpensive videotaping equipment which can be located in schools to preserve broadcast signals for playback at desired

times. Regrettably, the distance between theoretical and practical resolutions of this problem is apparently great. Videotape machines in the $25,000 range have recently been announced, but that is still a formidable price for any school to pay, and great technical skill is required to operate such a machine and keep it in repair. In addition, if every school in the nation owned a videotape record-playback machine, that single machine would hardly relieve the critical bottleneck in accessibility. It would be like having all of a library's books on microfilm but with only one microfilm reader at hand. And evidently the promise of a small "kitchen model" videotape machine, using smaller, cheaper tape and selling for a price near that of a classroom audiotape recorder and simple enough for a child to use, will not be realized soon. We apparently stand, then, in the position of being able to take signals off the air, at considerable expense in machinery, tape, and labor, but nowhere near the point where a large stock of those tapes can be placed in individual schools, not to mention in the student's own hands.

A second means of moving television to the right end of the "A Line" would be locally produced kinescopes, but quality here is notoriously poor, and, if film is used, one wonders why it shouldn't be delivered that way in the first instance.

Motion pictures today are much nearer the right end of the "A Line" than television, because of two developments. The first is 8mm sound film, which, if almost unknown in education today, may very soon challenge the traditional dominance of 16mm film. Within a few months some laboratories in this country will be ready to supply mass runs of 8mm sound film at costs very much lower than 16mm. (Small runs will make for less difference.) This 8mm sound could be film's equivalent of the paperback book.

The second development in film is the imminent breakthrough to simple projectors. There are many approaches to simplification which are possible. The most dramatic new approach is the cartridge-loading projector into which a child (or teacher) could shove the film, and, in effect, say "Go." There are at least three prototypes of full cartridge-loading 16mm machines in existence today in the U.S. (although none is as simple as it must be for purposes described here), and at least two companies are working on full cartridge-loading 8mm projectors. Endless-loop semi-cartridge arrangements are available for any number of projectors. The remaining bottlenecks standing in the way of small, relatively inexpensive full cartridge-loading 8mm sound motion picture projectors should be solved soon. But if that estimate, which is based on extensive study, is inaccurate other approaches to projector simplification—slot-loading or automatic threading machines—could be no more than months away. All of these projectors can be made in rear-screen projection types which, like television, can be seen in a lighted classroom.

This comparative look at the possibilities of moving television and film toward the right end of the "A Line" suggests, to say again, that film appears to be in a favored position in the years ahead. On the other hand, random accessibility is obviously not the only factor to consider in deciding whether to deliver materials in electronic or photographic packages. Cost is important, if not

decisive; but who knows which mode is the more costly, particularly with the advent of 8mm sound film? Teacher and student media preference is important, but, again, do we know enough of that? Immediacy, or at least timeliness of material--whether a reality or an illusion--is significant. Quality of the image is a factor. Planned obsolescence of material is another. And the subtle, but real formal or aesthetic differences between the two media should be considered.

An attractive way to get insight into significance of the accessibility question, and, incidentally, into other factors noted in the preceding paragraph, particularly cost, would be to set up an experiment with two large educational groups --city, state, or region. Provide both groups with the same material, one by broadcast television, airborne or earthbound, the other with libraries of 8mm sound film in individual schools, supplemented as new programs are available by mail deliveries. See that the "television schools" are equipped with good receivers and that the "film schools" have the simplest projectors available at the moment (even to the point of underwriting the development of radical departures from our traditional projectors). Then study the results.

The control room for the CCTV operation at the University of Akron. Chief engineer Robert Armstrong (seated), Prof. Ken Sibila, and William Mavrides.

"Stand By! Fade in One!"

CCTV at the U of Akron

By **R. H. Sandefur** and **William Mavrides**

Respectively, head of the department of speech, and television coordinator, at the University of Akron.

In January these commands became part of the educational lexicons of four instructors at the University of Akron.

The foresight of the university administration in bringing CCTV to the campus has helped solve, in part, the immediate problem of securing enough qualified instructors to handle adequately an increasing number of students. At the same time, by using TV, the university is improving class lecture effectiveness and is enlarging the scope of the learning process.

Akron U has a combined day and evening enrollment of about 7,000 students. Of this number almost 2,000 received part of their required courses via TV this past semester.

There are thirty-five rooms equipped to receive TV signals from the Kolbe Hall TV center. Through the aid of "talkback" facilities students in seventeen of these rooms may ask the instructor questions which can be heard in all the other rooms.

Nine programs can be transmitted simultaneously through the TV distribution system. Three of these can originate in the TV center and four are off-air commercial pickups. By using two cameras, each on a separate channel, a class with two receivers tuned to the separate channels could view simultaneously two different pictures of the same subject. This latter technique would be particularly effective where it is important to hold one shot while moving on to another aspect of the subject with the second camera.

More than six miles of coaxial cable, mike wires and miscellaneous other cables were installed in buildings and steam tunnels and about two miles of metal duct-work and conduit were installed within campus buildings. Electrical engineering co-op students and university electricians completed the installation which began in June, 1960.

Behind the scenes, all studio and control-room equipment operators are paid student assistants

representing most of the university colleges. A full-time engineer is employed to service and do preventive maintenance on the $64,000 TV system, which includes two RCA TK-15 studio cameras, film and slide projection system with two 16mm film projectors, turn-tables, etc.

About 640kw hours of electricity were used per week for a schedule of eleven teleclasses. The cost of the electricity was about $9.00 per week and this time included warm-ups, rehearsals, maintenance, and actual telecasts.

Several public-relations programs originated in the TV center and were fed by phone line to WAKR-TV (local commercial channel 49) for presentation as open-circuit programs. The commercial engineers were well pleased with the quality of the vidicon pictures and have indicated a desire to do more of such programing.

The following is a summary of TV classes given from February through June of 1961, and it must be stressed that TV on this campus is not a research project in the ordinary sense of the word. The students who received credit for the required courses could not take them for credit in any other way.

It is significant to note that of the instructors involved, three were department heads. All instructors, although having little or no broadcast experience, participated voluntarily. The administration arranged for these men to have time off from other duties for preparation of TV lectures in advance of the presentation of their courses.

In Analytic Geometry, for example, a very comprehensive study guide was prepared for all students, outlining in great detail the principal points of each TV lecture. Additionally, the math instructor had "live" conference

Course	Instructor	No. of Students	Cr. Hrs.	No. TV Lectures	No. of Sections
Effective Speaking (1:6)	Dr. R. Sandefur, Head Speech Dept.	687	2	14	7
Effective Speaking (1:7)	Dr. R. Sandefur, Head Speech Dept.	111	2	14	2
Reasoning and Understanding in Science (1:14)	Dr. T. Sumner, Head Dept. of Chemistry & Dean of Liberal Arts	498	3	44	5
Education in American Society (27:56)	Dr. J. Watt, Prof. of Education	110	2	29	2
Analytic Geometry (17:43)	Dr. S. Selby, Head Dept. Mathematics	150	4	61	2
	Totals	1556		162	18

sessions twice a week for all students who wished to attend.

Effective Speaking (both courses) involved one TV lecture and one conventional student performance hour per week. In this course, the instructor occasionally used the team-teaching approach, calling upon other members of the department to present some aspect of their specialization as it related to the course. In addition, selected students were called into the studio from the viewing rooms to participate in discussions or to present sample speech performances. Written midterm exams were administered through CCTV in the speech courses.

All other exams for this and other courses were administered in the conventional manner with no use of TV.

It is too early to draw finite conclusions about the effectiveness of TV as an adjunct of the teaching arm on this campus but this year television is being used as part of or all of the following courses—a weekly schedule of 17 hours: Algebra-Trigonometry, Effective Speaking, and a new 3-semester-hour speech course, Reasoning and Understanding in Science, Freshman Chemistry, Education in American Society, Radio Speaking, and Social Institutions.

A new education building for which ground is to be broken soon will include TV conduit, TV room lighting arrangements, TV outlets, microphone outlets, and two TV observation rooms, one of which has an adjoining control room and which could double as a second campus TV studio.

The TV coordinator, who is also an instructor in the speech department, operates the TV center as an autonomous service arm for the whole university. He is responsible to the dean of the administration.

His responsibilities include supervising the training of all TV center personnel such as camera operators and classroom proctors in the proper adjustment and placement of receivers in the viewing rooms and use of the talkback system, etc.

He serves as TV director and works as co-producer with each instructor, assisting in any manner necessary for the production of effective TV lessons. The instructor has the final word on course content. The TV coordinator is available not to tell him how to teach or what to teach but to assist him in fulfilling these objectives as effectively as possible within the framework of the CCTV medium.

A SALUTE TO OUR INDUSTRIAL ASSOCIATES*

Motorola, Inc.

Radio Corporation Of America

General Electric Company

Minnesota Mining & Mfg. Co.

Ampex Corporation

GPL Division—General Precision, Inc.

Adler Electronics, Inc.

Educational Electronics Division
Thompson Ramo Wooldridge Inc.
(formerly Dage Television Division)

Sarkes Tarzian, Inc.

Electron Corporation

American Telephone & Telegraph Co.

* "Any manufacturing firm, engaged in the manufacture and or sale of broadcasting and auxiliary equipment, wishing to further their cooperation with the NAEB and wishing to foster educational broadcasting through the NAEB may be elected an INDUSTRIAL ASSOCIATE." NAEB Constitution.

Book Reviews

Educational Television Guidebook, by Philip Lewis. A service project of the Electronics Industries Association, Educational Coordinating Committee. New York: McGraw-Hill Book Co., Inc., 1961. 238 pages.

On a note of simple logic, Philip Lewis sets the tone of the basis for this latest and excellent contribution to the field of publications about the mass media. Taking as his approach, "Education contributes to technological development, so why should education not use technological advances to upgrade itself," Lewis quickly comes to the theme of all that he will discuss: "The need is for quality education economically achieved, **not cheaper** education." And if this simple dictum seems a desirable wording of the philosophy of the true educator, often mouthed, but seldom remembered in the tangle with budgets, local group determinants of capital outlay, and the economically minded examiners of line items, at least the dictum is once more repeated as a conscience titillater.

In his first chapter, Lewis quickly reviews some of the reactions to the potential of television as expressed by outstanding educators and persons in the field of education, reviews the usual objections to the medium, quickly eliminates these objections by reference to what IS in the medium, rather than what is feared, and quotes Ralph Steetle's significant but little-known statement about the student of tomorrow: "Reaction of students to televised teaching gives evidence that tomorrow's student may be more of a self-starter, depending less upon constant spoon-feeding."

If the alert administrator (whether superintendent, curriculum supervisor, or school principal) gives intelligent acceptance to the potential of the medium as the author defines it in his chapter "Establishing a Perspective," the following challenging precepts must gain more than a modicum of attention and consideration:

1. The greatest potential of television may lie in its ability to REDUCE the size of the learning group;
2. Perhaps some of the greatest waste of human resources is in the small under-equipped school;
3. Through television, stimulating offerings can be provided for the gifted;
4. The television medium can and may bring our cultural heritage in the arts nearer to all of our citizens;
5. As a mass medium it may share the inspired thoughts and ideas of statesmen, scientists, artists, and teachers;
6. It may provide opportunities for youths and adults to obtain a college education which existing circumstances have precluded;
7. It can reinforce public understanding of social, political, and scientific developments, so necessary to an understanding of the

effective functioning of a democratic form of government;

8. Television may provide effective and convenient forms of preservice and in-service teacher training;

9. The medium can help the public become informed of school activities thus aiding the coordinated development of school-community activities toward common objectives. Since developments in commercial television have far outstripped those in other aspects of the medium, Lewis stresses the need to investigate those techniques that have been developed and to select those that are applicable and adaptable to sound instruction.

Educational Television Guidebook in several instances examines, and reexamines the advantages, modes of establishment and methods of operation of closed-circuit television. Obviously of great interest to the author, a firm and admirable case is made for the advantages to schools and whole systems' (as well as city and intercity) operation of CCTV. But if Lewis had rendered no other service with his excellent guidebook, the fact of his simple definition of a "television system" renders a lasting service to the uninitiated. In brief, a television system contains three basic elements: (1) a pick-up device (camera), (2) a means of distributing electrical signals to a receiving location, and (3) appropriate equipment for reconverting the electrical signal so that the viewer may view (a monitor or receiver).

Having noted that the more complex the system, the greater the need for quality components, Lewis then takes somewhat the following approach to equipment planning: First, what do you expect the equipment to do? Second, under what conditions will it need to do these things? Third, now analyze each piece of equipment you intend to acquire in terms of **what** it must do, and **when and how** it will do it.

But as Lewis rightly suggests by juxtaposing a consideration of the two elements, studio facilities and control room facilities cannot be regarded as individual matters but as interrelated matters. And if one relates facilities' needs to each other, in terms of the functions that the facilities will perform, we must also interrelate space needs to function, objectives, facilities, and service areas.

Throughout, Lewis takes the "tears" out of a technical explanation. Whatever the problem approached, Lewis does it in reasonable, layman terms, presuming little or no previous knowledge but great interest on the part of the reader. Diagrams and explanations are complete and without unnecessary technical detail.

Nowhere does Lewis better exemplify his meaning of the word "guidebook" than in his chapter on lighting needs. He gives a simple and direct analysis of the basic kinds of lighting, methods of hanging, and explains, simply, the meaning of common terms and the potential of various types of bulbs and basic equipment.

Lewis struggles valiantly with explanations in regard to transmission and distribution. Perhaps no author has yet found a foolproof way to make an easy, layman's type of explanation of this aspect of broadcasting. Although not as full, or as detailed as Head **(Broadcasting in America)**, Lewis nevertheless makes a simple, lucid, understandable explanation of the entire process of microwaving and goes a step further to explain modifications of microwaving designed to serve many different purposes.

When discussing "Reception

and Display" the author performs a service that few texts have thus far achieved. Again, although the information presented may not be new, it is collated in such a way that this guidebook becomes once more both an inventory and a simplification of technical information. This chapter on receivers and methods of group arrangement for viewing and discussion follow-up does not pretend to be exhaustive. It DOES present some common problems, solutions to the problems and a brief selection of interesting developments in display that are now in the experimental stage.

One could not leave an analysis of **Educational Television Guidebook** without some comment about the excellent Part IV, "Guideposts to Planning." Nowhere does Lewis better state the old adage, "You gets what you pays for," (and the corollary, "You pays for what you gets.")

In his excellent exemplification of considering equipment needs, and in his case studies of various institutions, each with a totally different investment, method of operation and staffing, and noted results, we are again struck by the thoroughness with which Lewis has not only considered problems but possible solutions.

In summary, then, **Educational Television Guidebook** is precisely that, a **guidebook**. It belongs on the shelf of every administrator, and layman, who may have an interest in planning or using the medium for educational, and particularly instructional, purposes.

However, placed on the shelf the title may be impressive but unless there is more than a modicum of knowledge of Lewis' excellent precis and overview of the medium, its development and its potential for education, the volume can serve little use.

The volume provides an excellent middle ground for a meeting of the minds between those who **plan** the use of the medium and those who are expected to make its use a matter of significant progress in upgrading the quality of education. This middle ground has often been one of lack of understanding of the problems involved. **Educational Television Guidebook** provides an excellent opportunity for the twain to meet.

—BERNARR COOPER
Florida State University

Rights and Writers: A Handbook of Literary and Entertainment Law, by Harriet F. Pilpel and Theodoras S. Zavin. New York: E. P. Dutton & Co., Inc., 1960. 384 pages. $7.50.

Without doubt, this is the most informative and useful handbook on the subject of literary and entertainment law that has been published in recent years. The subject of course is complex and has many ramifications, but this book, better than any I have seen, presents succinctly and interestingly the basic facts and principles pertaining to intellectual property and rights and their protection.

A great deal of the book has applicability to the broadcast media. Every broadcaster, both commercial and educational, should be concerned that he and his programs do not run afoul of laws pertaining to slander and libel, infringe rights of privacy and copyright, or misappropriate the ideas and creative works of others. Also, when does he become involved in unfair competition? What consti-

tutes censorship? What should he know about contracts? How is he affected by taxes and what can he legitimately do to lessen his tax payments? All these subjects and questions are thoroughly covered with detailed documentation. Important court cases are cited and discussed to support points of view expressed by the authors.

All broadcasting stations and creative artists associated with them should have access to this volume. Teachers in the radio and television field, particularly those concerned with management and regulations should have this volume available for ready use and should recommend it as a reference to students majoring in mass media study.

A book of this kind could be highly technical and make dull reading. Not so in this case. **Rights and Writers** is written in an easy, informal, and conversational style by competent persons who are members of the New York Bar. It is a tribute to them that they have been able to present important and valuable subject matter in a most intelligible style, and with a delightful sense of humor which makes for both enlightening and enjoyable reading.

A table of all cases cited appears at the end of the book which adds to its value.

—WALTER B. EMERY
Michigan State University

The Influence of the Cinema On Children And Adolescents: An Annotated International Bibliography, UNESCO, Paris, 1961. $1.50 (Issued by the Clearing House of the Department of Mass Communication of UNESCO). 101 pages plus Index of Authors. Available (in the U. S.) from UNESCO Publications Center, 801 Third Avenue, New York 22, New York.

This modest, paperbound volume suffers from all the afflictions of most UNESCO publications, due to insufficient budget for the fine printing deserved. The varityped pages are crowded and the type so reduced as to make reading difficult. My eyes still ache from reading it. But it is well worth the trouble.

For this volume does two things: It illustrates the unique function which UNESCO can fulfill in bringing together data on a given field, on an international, world-wide basis. And it reminds us of how much research has gone into studies into the effects of films--valid and enormous studies in many cases—which are all too often forgotten or ignored when we talk about the effects of television or radio today. One forgotten source for example, which sounds like a voice from beyond the grave: The League of Nations International Institute of Educational Cinematography!

This study is enough to make a mere American very humble. Except for the Payne Fund Studies of the 1930's, the U. S. cannot be particularly proud of what our rich nation has invested in this area --either in money or, more importantly, interest and concern. Some comfort can perhaps be taken from the fact that, although Russia's children's films themselves are superb, their studies, as represented here, are pretty mediocre.

But the publications and studies

described here which have been done in Germany, France, Italy, Switzerland, England, Australia, New Zealand, Holland, Denmark, Japan, and even Spain and Portugal, should both make us humble and awaken us to what is already known.

Many of these studies are important ones. Data has been assembled in psychiatric clinics, correctional institutions, hospitals, schools of every level, and so on. Each of the 491 books, articles, or journals abstracted, in many cases, contains from ten to several hundred references in its own bibliography. Hundreds of doctors, educators, researchers, and organized groups have spent long hours amassing and analyzing evidence of effects in this important area.

I cannot but believe that much of this data is relevant to television and radio. Against a background like this, many of the new books in the U. S., such as those of Klapper and of Schramm and Parker, are seen and tempered against a background which both we and their authors all too often forget or ignore.

How do you **discover** effects on children? A Danish study of the reactions of small children (250 infant school children and 350 pupils of the lower primary school classes) via infra-red photography, tape recordings, notes taken by observers, and what the children say, raises interesting questions: "The results showed that emotional reactions, particularly of infant school children, during the screening, were not in agreement with their replies to the questions put to them later on." (p. 59) In such cases, what does (which) the reporter or scholar use as "the facts"? How much of the contradiction we so often encounter today is due to such situations--or perhaps basing conclusions on what people **say?**

Another study of 163 children between 6 and 19 years of age--during sleep, from one of the forgotten Payne Studies (1933, Henshaw, Miller and Marquis) is interesting: "Visits to the cinema resulted in an even greater disturbance of the sleeping patterns than staying up until midnight. The influence of some films on movement (restlessness during sleep) was similar to drinking two cups of coffee in the evening." (p. 55) Are these findings now of so little use that we should push them back into limbo?

Another abstract begins: "The results of an inquiry among all children's courts in the Federal Republic of Germany in towns of more than 10,000 inhabitants—with summaries of the court's judgment concerning the part played by films in each case—" (p. 65) Where in this rich nation of **ours** are such records or data available—perhaps about television? Or do we want to keep facts and documentation from complicating our discussions?

Dozens of additional quotations would be needed to reveal the wealth and breadth of this modest publication. From Paris, for example: "The clinical case study of a girl of 14 afflicted with hysterical blindness after seeing the film 'La Symphonie Pastorale'." (p. 52). Or, regarding the increase of reading which, many say, results these days from TV etc., already in 1933 we found that young people "read more, but what they read is not of good quality." Do most modern U. S. studies ask: "Reading what?" Or is reading, of itself, for some odd reason, **good?**

But enough of content. I have always been grateful for my language training. I'm especially grateful now, for I can read most of the items listed, and have already read some of them. But the

present volume reveals a neat dilemma. For, although this bibliography itself is excellent, many of the works referred to are (1) no longer available, generally, as in the case of many of the Payne Fund studies; or (2) in any one of a dozen languages which not too many of our group can read.

Your reviewer is, unfortunately, not in a position to suggest how to meet **that** problem. Content to review the bibliography itself, I would say that the values from reading only this are considerable enough to justify a five-star rating of the "must read" type for all who presume to "sound off" on effects of the media. Vive UNESCO for this fine contribution.

—HARRY J. SKORNIA
University of Illinois

Broadcasting and Government: Responsibilities and Regulations, by Walter B. Emery. East Lansing: Michigan State University Press, 1961. 482 pages. $7.50.

Thoughtful people nowadays find it difficult to determine the proper role of government in broadcasting. The need to allocate physical facilities requires at least some government participation. The significance of radio and television as mass media leads to wide public concern over program content, and results in demands for government action. Yet, our democratic ideals require that broadcasting be protected from censorship. The dilemma, therefore, becomes that of how radio and television can achieve responsible performance standards without undue government regulation. Professor Emery's comprehensive volume should help clarify the issues.

This book provides a great deal of information about government and broadcasting. The early development of radio is outlined, as are the creation of the Federal Radio Commission in 1927 and the Federal Communications Commission in 1934. We are reminded of the great extent of the Commission's nonbroadcast activities. The structure and operations of the FCC are outlined, and the work of other agencies involved in broadcasting is reviewed. FCC provisions for the educational uses of radio and television are given considerable space. Professor Emery discusses the role of the FCC as public whipping boy, and relates some of its inconsistencies of policy to the frequent Congressional investigations to which it has been subject through the years.

Almost a third of the book consists of documentary material reprinted in ten appendices. While one may question the desirability of quoting forty pages from the Communications Act of 1934, since the entire text is available more cheaply from the Government Printing Office, there can be no question of the value of most of the appendices, such as the review of FCC chronology from 1930 to 1960, and the excerpts from certain program policy statements. There also is a bibliography and a good index.

One of the author's problems was how to combine an objective description of the structure and operations of the FCC with an appraisal of its policy performance. While he always identifies

fact and opinion as such, Professor Emery might well have added another chapter developing his own ideas in depth, even at the risk of repeating things said on earlier pages.

There should be much more research and writing about the mass media by scholars trained in law, history, government, economics, and related fields. The psychologists, philosophers, sociologists, and statisticians have dealt with theories of communications and with the effects of the mass media on society. But there is only one comprehensive "biography" of a radio station, and there have been no histories of networks, advertising agencies, or of the FCC itself. Despite many individual program reviews, no one has written comprehensively about long-term developments in programing. The economic and financial aspects of broadcasting also have been neglected.

This book is a scholarly and thorough treatment of an enormously complex problem, for which the author is to be highly commended. The unfortunate thing is that it was not published ten years ago. We can only hope that Professor Emery or someone else will write more books like it in future years to deal with changes in FCC procedures and policies as they occur.

—Burton Paulu
University of Minnesota

TV: The Big Picture, by Stan Opotowsky. New York: E. P. Dutton & Co., Inc., 1960. 318 pages.

If you're a student or professor of broadcasting who just married a chem major, here's the book for **your wife** to read. When she's done she won't qualify as a scholar in the field, but when you begin "talking shop" at the next party, she won't sit around looking stupid, either.

TV: The Big Picture, is, as its author states in his introduction, not a book "written by an insider, nor . . . for insiders . . . (But) for those who sit on the livingroom side of the screen." In short, neither scholarly tome, nor text, but a volume designed to present to laymen, at the lay level, a comprehensive overview of the totality which is TV.

This it does in twenty-six brief and breezy chapters which deal with everything from the inherent contradictions which must arise when a democratic government is forced to regulate a medium of communication, to how to make a non-dancing Diana Dors dance (and frankly, who cares whether Diana Dors (!) can dance); the myriad of factors a sponsor must consider when selecting a program vehicle, to the Internal Revenue Service's "Dinah Shore Ruling": "A dress can be deducted . . . as a business expense if it's too tight to sit down in." (And if your wife can find some way to maneuver that into the conversation, she can keep quiet with confidence the rest of the evening!)

Despite a few glaring errors—e. g., compatible all-electronic CBS color did not finally win out over the mechanical-disc NBC system (inverted descriptions **and** networks); nor has Section 315 been repealed (but only as it pertained to Presidential campaigning, and then only for this

past national election); many more minor ones; and still more distortions resulting from a tendency to gloss over, or over-simplify complex developments—the book's comprehensiveness and freshness may make it just a bit more than a pleasant afternoon's reading for the husband already immersed in the lore and knowledge of the field. For example, Opotowsky's discussion of ABC's programing philosophy goes deeper than the usual damning of—though it still damns—that network's practices; or his somewhat uniquely stated retort to the usual economic-based industry-**apologia** for the dearth of quality programing: "Wouldn't you consider it outrageous if your local newspaper announced that it would not cover the state legislature this session because it had lost its sponsor? Or because a survey showed that legislature stories received only 3.1 percentage of readership while Dick Tracy was getting 42.7?" (p. 173)

Unless you feel the few new insights and perspectives about broadcasting you might possibly gain from passages such as the above are worth the three or four hours it will take to read this, you'll be better off ignoring **TV: The Big Picture**, and using the time to review your wife's basic chem text.

But if she wants to become a little more knowledgeable about sponsor taboos than you probably are about valence bonds—and how many times do **they** come up in conversation at a party—she would profit considerably by using that time to read Opotowsky's overview.

—Dave Berkman

New York Institute of Technology

Frame and Focus

with Vernon Bronson

By the time this is read most of the readers will probably have become familiar with the NAEB report of the Survey of the Needs of Education for Television Channel Allocations, or at least I hope so. However, I believe that you will be interested to know that there were many side-learnings and residual understandings derived from the survey which were not formally recorded, nor specifically included in the report.

As it turned out, this study was both macroscopic and microscopic in aspect. It provided some detailed examination of some of the smallest parts of our educational system, and it made possible a panoramic view. To me the most significant thing about this aspect of the survey was the fact that the lights and shadows revealed in the various parts and segments were proportionately reflected in the whole of our system of education for the most part.

It is true that the detail and degree of educational need varied among the various communities —between the urban and rural, the affluent and the impoverished areas; but in large measures many of the basic needs and problems were very much the same.

Whether in the isolated schools of the Great Plains states and mountain regions, or in the crowded systems of the large cities, the major problem, next to finances, is the improvement of instruction. First, how can we provide the plant facilities? and next, how can we provide the kind and quality of instruction that will beget the knowledge and understanding that will meet the demands of our times and our future?

From the contacts and discussions in this survey, and the hundreds of personal and official expressions received from every part of the country, it is apparent that a great many thoughtful and responsible educators are convinced that good teachers cannot be mass produced, that custom-quality has become increasingly important in the selection and development of teacher material. There is a widespread feeling that a searching reappraisal is indicated for the curricula of teacher-education institutions, and for the methodology of teacher preparation.

Of equal significance was the general complaint of the inadequacy of in-service education of teachers. In many places it is negligible or nonexistent, and in many others where token programs are in effect the training offered is basically ineffectual, and not consonant with teacher development and instructional improvement. Strangely enough, in many instances, the administrators who are primarily responsible for the improvement of instruction and the development of teachers were the most forthright in stating the need and deploring the deficiency of adequate and continuing programs of in-service teacher education and development. It was rarely put into so many words, but the impression seemed to be that many just do not know where or how to start. There are so many needs and so few resources! Many of the older

teachers resent being prodded, and many of the new recruits are indifferent and bored with the repetitious courses they have endured in their preparatory stage!

Many different suggestions were made, from both state and local levels, as to how television might be used in the development of pre-service and in-service teacher education; but there appeared to be a preponderance of opinion that this was one of the areas where television ought to make a major contribution. The fly in the ointment seems to be the revision of curricula and course content, the development of effective techniques of presentation or more accurately the development of teacher-educators who can realize the potential of the new media and correlate it with the need, and lastly, overcoming the drag toward change and the traditional lag in educational practices.

There seems to be an increasing awareness at the state and local levels of the urgency for progress in these directions, but strong leadership is lacking to point the ways. There are lots of discussions and conferences and research reports, but there does not appear to be any clear blueprint or strong plan of action. In many instances the efforts to keep the old structure intact until the new is built out of the materials of the old one have further confused the issues.

It seems to me that the NAEB has been thrust into a position of leadership in many of these areas which have heretofore been considered out of its domain. In its survey on the needs of education it has established that the greatest use of educational television in the future will be in the field of instructional television and that such use will pervade the entire structure of education. It has a responsibility to take the lead in helping chart the course for such use, in establishing patterns of continuing teacher-education on all levels, and in defining changing skills and techniques necessary to effective instructional communication.

In the survey there was much evidence of confusion and misunderstanding and just plain ignorance of basic communication values as applied to the improvement of instruction, and more confusion as to the interrelationship of all media of communication in the teaching-learning process. Such values and such relationships need to be spelled out in clear and certain terms. This is a continuing responsibility of the NAEB and its professional membership. It will be their major contribution to the efforts of the educational community to meet the qualitative challenges of the new era we are facing.

Educators and ETV

School administrator presents a challenge

By Neal V. Musmanno

Deputy superintendent of public instruction, Commonwealth of Pennsylvania. Taken from an address before the American Association of School Administrators, March 28, 1961, Philadelphia.

Many reasons may be presented by educators to explain their delay in taking advantage of the 268 television channels allotted them by the FCC—details involving money, jurisdictions, organizations and all the rest. But it would seem that educators are generally slow to move, and that regardless of explanations given, "the hostility toward television in education circles," as stated by Fred Hechinger of the **New York Times**, is "based on a combination of fear of the unknown, job insecurity, and plain professional conservatism."

It is a paradox that the very teachers and school administrators who are calling upon students in their schools to respond to the stimulus of technology see themselves to be archaic technologically, so to speak, and resist the advanced instructional materials and techniques of mass media communication.

The time may actually come, if educators continue their lackadaisical attitude toward acquisition of the allotted channels, that commercial interests may petition the FCC to reconsider the assignments of April, 1952; and it could even happen that educators might lose what they presently have in television coverage. And if this does happen, there is no doubt educators will complain that they are being deprived of what rightfully belongs to them!

The question is asked: **"Is state and local control of education being threatened through the development of regional and national television?"**

First I should like to consider the two key words in the question—namely, "control" and "threat."

If the term **control** in this question is intended to mean domination and restraint to the point of limiting or isolating a particular educational program to a particular locality, then, of course, such

control would be detrimental to the general welfare; that is, the educational welfare of the school children in the entire nation might be adversely affected. To speak of "control" being "threatened" is to suggest something ominous in both "control" and "threatened." Threat would seem to imply menace or intimidation—something foreboding—as if some devious force from elsewhere were approaching a local or state community for the purpose of doing harm.

But, on the other hand, if we set our sights high enough to view the word "threat" to local or state control as meaning an outside motivating, benevolent force seeking to unshackle tight local controls, then a **threat** of this kind might be very desirable. We might put it another way. If we were to visualize a situation where local control of education amounts to such an impenetrable wall that the children may not obtain instruction from sources beyond the limits of their own local educational districts, then a "threat" to cut through that wall so that students could obtain broadening knowledge from other communities, states, or even other nations, could be that kind of "threat" requiring our immediate and even eager consideration.

There is no doubt that there are certain ambiguities and even delusions about "controls" in education. Since each state is sovereign in its mandate over the curricula and courses of study in its schools, there is no limit to the control it may exercise. If that control is severely restrictive, ignoring what is happening in the rest of the educational world, the children may be denied what should be rightfully theirs in this world which is becoming more and more homogeneous.

Of course, local school districts and the state itself are subject to the power of the people to demand certain things in education. The authority of the people in this respect has been the subject of litigation in various courts including the United States Supreme Court over the past seventy years or more. For instance, in Indiana in 1891 (**Board of School Commissioners of the City of Indianapolis v. The State, ex. rel. Sander, 129 Ind. 14, N. E. 61**) the Supreme Court of that State declared that parents or guardians of children in the public schools have the right to petition school boards to teach certain subjects not specified by state statute. This same principle was affirmed by the Supreme Court of the United States following the famed Nebraska, Iowa, and Ohio language cases in 1923 (**Meyer v. State of Nebraska**, 43 Sup. Ct. 625, 262 U. S. 390; **Bartels** v. **State of Iowa**, 43, Sup. Ct. 628, 262 U. S. 404; **Pohl v. State of Ohio** 43 Sup. Ct. 628, 262, U. S. 404; **Bohning** v. **State of Ohio**, 43 Sup. Ct. 628, 262 U. S. 404). And then there is the famed Oregon case of 1924 (**Walter M. Pierce** v. **Society of the Sisters of the Holy Names of Jesus and Mary**, 45 Sup. Ct. 571, 266 U. S. 615, 69 L. Ed. 1070) in which the United States Supreme Court declared that parents possess the right to have their children instructed in whatever courses of study they desire beyond the gates of the public schools since the child is "not the mere creature of the state." It must be added here, however, that the state has absolute power to require certain studies essential to good citizenship and to prevent the teaching of things "manifestly inimical to the public welfare."

It could well be that some of the failures we face in education today result from certain local and

state restrictions. It is possible that regulatory controls have been so strict and so constrained that the pursuit of excellence for each child has been impeded by them. All of us know that the public schools, as all educational facilities, have been under severe attack over the past recent years. This attack is aimed principally at the curriculum. From all quarters bombardment is directed against what the children are learning in our schools. And in the final analysis, the criticism is aimed at the limiting factors of educational programs throughout the nation.

We must admit at once that to confine our school children within the boundaries of a too-narrow control, is to isolate them against universality—preventing them from reaching out to the stars!

As a result of American message transmission experiments through the satellite projects, especially those including "Echo I," it may safely be predicted that communication satellites will soon make world-wide television possible. And with the satellite program racing at such speed that the planet Venus is expected soon to have a visitor carrying a Soviet banner, one may safely predict that world-wide television via the satellites will be ready within the next ten years.

Once world-wide television becomes a reality, we may assume that the first satellite telecasts will cover world events around the globe. As soon as world events programs are established, it is inevitable that orbiting educational television will follow, just as now local educational television is an accepted part of American daily life.

The world-wide television of the near future will be a multi-way flow of audio-visual communication. As we will be visually taking in the events and programs of other countries, they will be seeing what is happening in America.

And this will be all to the good. What the nations of the world need more than anything else is mutual respect. That respect can only be built on understanding and that understanding can better come about through instantaneous interchange of knowledge and customs made possible through world-wide radio and television.

Through the active and aggressive initiative of educators in harmonious communication, lesson units in various subjects could be developed for transmission to classrooms in other countries. Thus, a master teacher of science in Germany would be scheduled to teach certain units in the subject for the edification of students around the world. A master Russian teacher of mathematics could do the same in his field. A master teacher in America, in whatever subject, would do likewise, and so on around the world.

Naturally, the foreign language would have to be understood by us as English would have to be understood by others, and this would supply the stimulating and inspiring force for the genuine desire to learn foreign languages. And in this respect, alone, learning a foreign language would be truly meaningful.

At the same time, school boys and girls around the world would be seeing how other children go to school and would note, perhaps with astonishment, that children are basically the same the world over, changing only by what is taught them by adults! All students with their teachers, parents, and the entire population of a community, state or nation would naturally gain boundless understanding of peoples in other countries and there would develop an appreciation for the cultures of other peoples never before achieved or even understood.

In this way school children, as well as adults, would be learning world cultures. If properly presented, with **educators** taking the lead, this understanding of global cultures could be a great force for uniting people everywhere because we know that people everywhere want to understand each other, and want to live in peace with each other. And how can anyone deny that it is only through education that the goals of world peace may effectively be reached and perpetuated? And I do not believe that I am indulging in mere wishful thinking when I say that this great desire of the population of the world for world peace can actually be achieved in a comparatively short time—perhaps in ten years, through world-wide television!

However, we should not sit back and with a complacent do-nothing attitude wait for this momentous happening, as if it will come of its own volition. We must participate in this epochal development and, by that participation, have a part in guiding it as well as a vigorous voice in leadership for determining jurisdictions and determining control.

In fact, as we express concern about local and state controls of education possibly being taken away from educators by regional and national educational television, we are facing the moment when world control of television may actually be upon us. And the question mushrooms in fury like a nuclear blast—**who then will be in control?**

While the television and radio channels as we now know them are governed by the Federal Communications Commission and are under the strict regulatory control of the United States Congress, who knows what undiscovered channels from outer space may one day become vast passageways for the transmitting of programs—educational or otherwise—by an agency outside America? And perhaps for devious purposes and beyond even the power of Congress to avert, much less control.

But let us consider our immediate local problems since they demand our prompt attention and solution, without, however, relegating into forgetfulness the need for educators to gear themselves for the long-range plans—plans which may embrace the 1970's, the 1980's, the next generations.

It has been observed by people outside as well as within our profession that educators resist and resent change. It has been my observation in my twenty-five years in education—in the elementary schools, secondary schools, and in public school administration and university professorship—that this professional and lay observation is not without some justification.

All of you are undoubtedly cognizant of the fact that even on a local basis, changes in programing, instructional materials, facilities, and so on, have not always been met with an approving countenance by educators.

For instance, during the past fifty years when high-speed printing techniques, radio, sound-motion pictures, and other types of mass media communication methods were being developed and exploited, American educators generally have failed to apply these devices quantitatively to the instructional process and thus failed to develop the appropriate technological systems necessary for their application.

Strangely enough, although the problem of school finances with respect to this matter is undoubtedly a serious one, this is not the major barrier across the highway of advance in this direction. The major obstacles seem to have been

rather a series of repeated, inveterate outworn patterns of thought, and, as Hechinger indicated, especially false fears among educators that devices designed to help teachers might one day become the very means of displacing teachers.

Speaking of "false fears," it will undoubtedly interest you to know that thirty years ago—in December, 1931—the **Wisconsin Journal of Education** seriously asked the question in an article: "Can the radio supplant the classroom teacher?" Naturally this sounds incredulous in 1961; yet many new educational tools and devices being developed and tried today are in some quarters looked upon with the same suspicion even as books originally were in primitive society.

Rather than fight the electronic machine, would it not be wiser to understand it and its use in the educational community? We know for a fact that today many of our teachers do not know how to use motion pictures, filmstrips, radio, records, tape recordings, and, of course, television, and many other startling inventions which the modern world is offering to education.

Perhaps the most shocking failure in this respect is the misuse or nonuse of radio by educators. World-wide radio communication is available now, but there are probably very few schools or classrooms in the world taking advantage of it. For instance, radio genius has provided for instantaneous communication between classrooms in different countries. A classroom in Africa or South America has the facilities, if employed, to communicate with a classroom in the United States for interchange of ideas in methods of education. Through this medium a student may become an active participant in world affairs. How many educators have taken steps to utilize this tremendous force for the understanding of world cultures and for world peace?

Although technically we may communicate with the world, educationally or human-relations wise we are still in the crystal-set era. In fact, while we have been jet propelled technologically, we are still crawling through the underbrush of misunderstanding, so far as human relations is concerned.

A generation ago if an American student wanted to hear French, German, or Spanish spoken, he was usually dependent upon his teacher who had taken only a few courses in college. Today it is possible through the mechanical devices mentioned and others to hear the original language in the very country of its origin and daily use.

Educators around the world must unite to conquer the threat of human ignorance. A special urgency attaches itself to world-wide educational television when new nations constantly being formed face almost insurmountable problems in educating whole populations quickly and with a few trained teachers. Who will supply these teachers? Communism or democracy?

Educators must exert themselves to wed the wonders of technology to sound educational practices. Compatibility is paramount.

We will fail to keep up with the world's technological advances if we continue to fret about threats of usurpation of our educational leadership by television "controls." Scientists and technologists move on, impatient with the indolent teacher whether his pupil be sitting at the other end of a log or in a cathedral of learning.

The world is shrinking. It is vital to all of us that we know

what is happening throughout this shrinking world and especially across our own nation. Broadcasting must be used to transmit from state to state, from community to community, the best that our nation has to offer in the way of education for our youth. A dramatic illustration of this concept is the far-reaching airborne telecasts in the midwest which reach more than 500,000 students in six states—Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin—with lessons in science, history, mathematics, French, art and music, transmitted from an airplane flying 23,000 feet over the state of Indiana.

Educational television offers even greater facilities. We must prepare to have master teachers in our national neighborhood, wherever located and whatever subjects they teach. They must be seen and they must be heard by as many teachers as possible so that, they, too, may learn the techniques of this mastery and apply them in their own classrooms.

Hundreds of schools throughout the nation which once offered only the fundamental subjects and these only to a limited degree are now able to broaden their curriculum through educational television. A vivid example of this extension in educational facilities was described in Washington, D. C., at the U. S. Senate hearings on the Magnuson Bill which deals directly with this subject. I attended these hearings and heard testimony to the effect that whereas only 59 pupils were taught the Spanish language through conventional methods last year in the state of Minnesota, more than 30,000 fourth graders are being taught Spanish by a master teacher in that same state this year through educational television. And then, I might refer to what happened in Pennsylvania along that same line. In 1958 the state superintendent of public instruction asked the state's public schools to consider the Russian language as part of the curriculum. As a result of this recommendation approximately 1,000 pupils enrolled in Russian language courses; but it is to be noted that as much as one-half of this number were instructed through educational television stations in Pittsburgh and Philadelphia. Numerous similar illustrations could be given on educational television throughout the nation. In addition, heartwarming examples prevail with respect to the use of educational television and radio for the handicapped children—the blind, the deaf, the retarded, the homebound.

Those who believe or assert that there must be a rigid state and local control of education imply that we must build a high wall or cofferdam of educational geographic confinement around our children. But what is to happen when the educational schedule is completed and our children set out to pursue their own respective careers perhaps in other communities?

Our people are migratory in nature. A total of 5 million Americans move from one state to another annually. This very mobility of population in America emphasizes the fact that a high standard of education in one state can be nullified by poor schools in other regions. The needs of our nation, in the interest of national security as well as individual accomplishments in these times of international strain and competition, require that each individual be educated so he may be able to perform at maximum level of

educational proficiency everywhere.

One of the most serious problems facing our country is unemployment. Automation, of course, is responsible for a great deal of this unemployment, but with that unskilled unemployment there rises the demand for more and more technicians and higher-skilled workmen. This demand will continue to increase. Here is where educational television can be thrown into the breach.

Educational television is one method through which the unemployed might be retrained and redirected into gainful occupations. Furthermore, it could show the vocational school student the inside of every job in America. With educational television sweeping across the nation, candidates for employment need not have to wonder what occupation they should train for. They would see and they would know.

World conditions make it imperative that our children must be prepared to take their places anywhere in the world. To confine them, therefore, to local or state control, is to handicap them in the eventual competition they must face. Unreasoning control deprives them of the equipment so vitally necessary in meeting this competition—it cripples them, in fact, before we set them free. Their wings of knowledge are plucked as we release them to soar in the skies of endeavor among the others, and then we flee in bewilderment as they tumble, although we are prompt to turn in indignation if questioned about our manner of training them.

The basic concern of educators, it seems to me, is not the question of whether local or state control of education is being threatened by regional or national television. The real question which faces us is: **Who is to govern educational television?** It is a known fact that many persons formerly in commercial television are shifting to noncommercial or educational television. But these persons do not become educators simply because they change hats.

Let the telecasters and the technicians and the businessmen contribute their know-how in effective programing; but let the content, the development, and the coverage of in-school educational television be the responsibility of educators. Our teacher-education colleges and universities need to give more attention to the proper training of teachers for this new role. We find little evidence that future teachers in these institutions of higher learning are being equipped to manage television direct-classroom instruction, and no evidence at all that college courses are being offered in the area of supervision of education by television. It might be well to consider also the need to develop teacher skills in the production and use of educational television through regional workshops.

If the time comes that non-educators, in noncommercial television, will build networks to carry curriculum materials into thousands of schools to countless schoolchildren throughout a region or the nation, without responsibility to anyone in education for the selection of programing and its content, not only will local and state jurisdiction be in peril, but the entire concept of American education, implicit in our way of life will be in dire jeopardy.

Foundation, state, and federal funds allotted to educational television should be used only for those educational television channels and networks feeding programs into our schools which have actual educators at the

microphones and before the camera. Educators should not acquiesce to Hollywood and Broadway stars teaching school subjects on television. Unless he is actually a teacher, no professional actor can take the place of the educator on television. To have actors teaching would be to cloak the entire instructional presentation with insincerity. We want **genuine** teachers to teach our children on educational television. However, I hasten to add here that for certain types of educational programs, in or out of school, for children or for adults, there should be no question that we would use the talents of great authors, lecturers, public officials, men of science, men of the law, artists, musicians, and all others especially qualified in their professional fields.

In conclusion, I would like to express what you already know as melancholy fact, namely, that many critics outside the profession look upon educators as being generally content with the **status quo**, as opposed to those in the fields of science and technology who respond sprightly and instantly to change. Unfortunately, these critics might seem to find some affirmation of that idea in the situation to which I adverted in my opening statement, namely, that only 54 on-the-air educational stations have been established in the nation over the past nine years, although there exists the opportunity to create 268.

But after my service of a quarter-century in public education, the question that concerns me is not whether television is threatening local or state control of education, but whether control of education is being threatened through possible abdication by educators of their role as leaders in this electronic era.

Whatever may have been the problems we confronted in the past, our schools and our school people certainly are challenged today as never before—as we face the dawn of a crisis. This is not the time to make petition, nor to implore for leadership. Moreover, leadership is not achieved through imploration but through use of the baton already in one's hand.

Precious time inexorably races by. The moments for action are upon us. This could, and must be our "finest hour" as we face the greatest challenge in the history of education. Educators must now take the initiative and with energy and imagination, head the dynamic forces of mass media communication. This is our challenge —to the end that each child will become a truly enlightened and competent citizen of America and the world, free to do God's work on earth.

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2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual owner, must be given.) National Association of Educational Broadcasters, 1346 Connecticut Avenue, N. W., Washington 6, D. C. (no stockholders; a public corporation: incorporated, State of Illinois).

(My commission expires Feb. 6, 1965.)

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960 to be included in all statements regardless of frequency of issue.) Approximately 1800.

HAROLD E. HILL
Business Manager

Sworn to and subscribed before me this 5th day of October, 1961.

(SEAL) ELIZABETH A. McKENZIE

NAEB Research Fact Sheets

Series I: The Effectiveness of Television as a Teaching Tool

96. Television in Army Training: Color Vs. Black and White

By Joseph H. Kanner and Alvin J. Rosenstein, Audio-Visual Communication Review, *November-December 1960, pp. 243-252.*

This study is one of a series of U. S. Army Signal Corps studies designed to investigate and develop the use of television for military training and is the first of two studies on the role of color television. It was carried out at the Signal School, Fort Monmouth, New Jersey, using television facilities, trainees, personnel, and subject matter available at that installation. Also participating were personnel working in the mobile color facilities of the Army Pictorial Center.

The major objective of the study was to compare the teaching effectiveness of color and monochrome television instruction. Subsidiary analyses were also made of the effects of trainee aptitude and type of subject matter upon learning.

All instruction–11 different lessons–was presented live by a mobile color television facility from the Army Pictorial Center, Long Island, New York. Each presentation was shown simultaneously to each of the experimental groups–consisting of 12, or fewer, trainees. They were seated about 10 to 30 feet away from the 21-inch monochrome TV receivers, viewed in classrooms at Fort Monmouth.

All comparisons were based on multiple choice tests given immediately after the instruction. An effort was made to incorporate color items into the tests. These were items in which color seemed to play a relevant role in understanding or answering the question.

Seven instructors participated. They taught as they would in the classroom. Where color seemed to be important, the colors were pointed to and described so that the monochrome groups would hear the names of the colors being used.

RESULTS:

The major question under study was whether color or monochrome

television produces any difference in learning. The results of this study provide no evidence that such a difference exists.

The one significant comparison in favor of color, automatic Range Tracking, is considered unimportant in view of this over-all picture and small differences in test performance.

There is a statistically significant difference in the performance of the high and low aptitude groups with respect to the type of television used.

CONCLUSIONS:

1. There is no significant difference between trainee learning produced by color or monochrome television instruction.

2. There was no significant difference in performance upon color and non-color test questions by the color and monochrome television trained groups.

3. There is suggestive evidence that high aptitude trainees learn better from monochrome television and low aptitude trainees learn better from color television. But the important factor in predicting amount of learning is trainee aptitude.

—GERALDINE JOHNSON

NAEB

Research
Fact
Sheets

Series I: The Effectiveness of Television as a Teaching Tool

97. Retention of Subject Matter in Televised Biology

By James N. Jacobs and Joan Bollenbacher, Audio-Visual Communication Review, *November-December 1960, pp. 275-280.*

During the 1957-58 school year in the Cincinnati public schools, 180 pupils in six classes were taught biology by TV while another 180 pupils in six other biology classes were taught in the conventional manner.

The experimental classes were given TV instruction every other day for a full 50-minute period and received conventional instruction on non-TV days.

In March, 1960, the pupils participating in the 1957-58 experiment were given an alternate form of the Cooperative Biology Test, administered as a post-test one year and ten months earlier.

Both TV and non-TV students were subgrouped on the basis of the number of science courses taken in addition to biology.

Three covariance analyses were made to determine the achievement at the end of the 1957-58 study. They were: one for groups who pursued no further science courses; one for groups pursuing one other science course; and one for those taking two other science courses.

RESULTS:

It appears that although the TV method was found to be significantly superior to the conventional method immediately after the experimental period, this superiority is canceled after follow-up testing approximately two years later.

Also, a lack of significant difference between the adjusted follow-up test methods averages is not a matter of a significant decrease in test score for the TV classes but rather a significant increase for the non-TV classes.

CONCLUSIONS:

TV instruction in biology did not result in a greater or lesser de-

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NAEB Journal, 1961

Statement required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, July 2, 1946 and June 11, 1960 (74 Stat. 208) showing the ownership, management, and circulation of the NAEB Journal published bimonthly at Urbana, Illinois, for October 1, 1961.

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Publisher: National Association of Educational Broadcasters, 1346 Connecticut Avenue, N. W., Washington 6, D. C.

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HAROLD E. HILL
Business Manager

Sworn to and subscribed before me this 5th day of October, 1961.
(SEAL) ELIZABETH A. McKENZIE

NAEB Research Brief Series

Series I: The Effectiveness of Television as a Teaching Tool

96. Television in Army Training: Color Vs. Black and White

By Joseph H. Kanner and Alvin J. Rosenstein, Audio-Visual Communication Review, *November-December 1960, pp. 243-252.*

This study is one of a series of U. S. Army Signal Corps studies designed to investigate and develop the use of television for military training and is the first of two studies on the role of color television. It was carried out at the Signal School, Fort Monmouth, New Jersey, using television facilities, trainees, personnel, and subject matter available at that installation. Also participating were personnel working in the mobile color facilities of the Army Pictorial Center.

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—GERALDINE JOHNSON

NAEB Research and Media

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During the 1957-58 school year in the Cincinnati public schools, 120 pupils in six classes were taught biology by TV while another 120 pupils in six other biology classes were taught in the conventional manner.

The experimental classes were given TV instruction every other day for a full 50-minute period and received conventional instruction on non-TV days.

In March, 1960, the pupils participating in the 1957-58 experiment were given an alternate form of the Cooperative Biology Test, administered as a post-test one year and ten months earlier.

Both TV and non-TV students were subgrouped on the basis of the number of science courses taken in addition to biology.

Three covariance analyses were made to determine the achievement at the end of the 1957-58 study. They were: one for groups who pursued no further science courses; one for groups pursuing one other science course; and one for those taking two other science courses.

RESULTS:

It appears that although the TV method was found to be significantly superior to the conventional method immediately after the experimental period, this superiority is canceled after follow-up testing approximately two years later.

Also, a lack of significant difference between the achieved follow-up test mediate averages is not a matter of a significant decrease in test score for the TV classes but rather a significant increase for the non-TV classes.

CONCLUSIONS:

TV instruction in biology did not result in a greater or lesser de-

gree of retention than did conventional instruction after approximately two years.

There is some evidence to show that above average pupils who were taught biology in the conventional manner have a greater potential for transfer of learning than pupils taught by TV.

—Geraldine Johnson

NAEB Research and Review

Series I: The Effectiveness of Television as a Teaching Tool

98. An Educational Experiment with On-Campus Open-Circuit Television

By Robert W. Jones, The Journal of Educational Sociology, *March, 1961, pp. 300-308.*

This study probes the issues of the question: Are there pedagogical or administrative advantages which might be gained through transmitting regular courses by open circuit to resident students as part of their curricular program.

Open-circuit transmission of one lecture (a social science course treating such controversial topics as race, evolution, religion, and politics including an analysis of communism as a political system) for resident students was made the basis of an experimental situation. The aim of the experiment was to determine the factors influencing and the academic consequences of this choice.

This course was offered by open circuit for regularly enrolled students at a large Midwestern university in 1959 and 1960.

During this period the student body numbered about 19,000 and the community in which the university was located was slightly more than 50,000.

The course enrollment came principally from liberal arts and sciences and the college of education. The course called for two lectures and two discussions for each student. Each lecture was offered twice, once in a large lecture hall and once by open-circuit TV.

The primary variable in the experimental situation was that the students enrolled in the TV lecture were given the opportunity to view the lecture wherever they had access to a TV set which could receive the signal from the university transmitter, whose radius of reception was approximately twenty miles. Four classrooms were equipped with sets for students who wished to view the lectures in university buildings.

The problem of the study was to discover what places the students selected for viewing, to estimate what factors led to these choices, and to explore what influence this freedom of choice of viewing place had on academic performance, on class lecture attendance, on attitude toward a TV presentation, and on interest in the subject matter. The control group for the study was the group of students who attended the lecture in a large classroom.

The data for the study included two questionnaires administered the fourth and fourteenth weeks of the semester, interviews with students, observations made of behavior both in TV and classroom lectures, and reports from discussion leaders on comments and questions raised by their students on the conditions of TV presentation.

At the beginning of the semester, of the 375 students registered in the course, 47 per cent were in the TV lecture and the balance in large classroom lectures. By the fourteenth week, however, 11 per cent of those originally in the large classroom had transferred to TV viewing, while slightly less than 1 per cent of the original TV lecture had gone over to the large classroom.

In viewing habits, 86 per cent of the students saw the lecture predominantly in one place, while 14 per cent of the students used a combination of places.

The type of housing in which the student lives appears to be the major determinant of his choice as to where he will view a course lecture by TV if he is given the opportunity to choose. Of the students in this particular course, slightly more than half of the TV lecture group lived in university dormitories, and the remainder were equally split between fraternity-sorority and independents, with some living at home. The dormitory students were most likely to view the lectures at their places of residence.

Reaction to the conditions of viewing was, in general, positive for residence and non-classroom places and negative to classroom.

Academic performance in the course was taken to include both the student grade earned on examinations and the attendance at lectures reported by the students themselves on the questionnaires. The effect of TV presentation on academic performance was determined by comparing the experimental group in terms of examination grade and reported class cuts to the control group consisting of those who attended the lecture in a large classroom. The average grade of the TV group was middle C and that of the classroom group was a high C. Those students with the lowest scores and lowest high school rankings were mainly in the 14 per cent of the class who did not regularize their place of viewing. It would appear from these figures that poorer students adopted a distinctive and unorganized pattern of TV viewing under the conditions of the experiment.

CONCLUSIONS:

The conditions of TV presentation apparently had greater appeal than classroom lecture.

The student's place of residence appeared to be a major influence on his choice of a place of viewing.

The control group made better grades, slightly.

Attitudes of approval of the course as a whole or the ranking of preference for it among other courses taken did not show significant variation between the two groups.

If students are exposed to an open-circuit TV presentation, they will on the average favor it.

The competition of commercial programs of general disinterest in academic subjects appears to be such that consistent non-student viewing of classroom subjects will be done by a small fragment of the local TV-set-owning population.

Certain unique gains, then, relative to student motivation and to increasing the available space for TV viewing may be achieved through this mode of transmission.

—Geraldine Johnson

NAEB

Series I: The Effectiveness of Television as a Teaching Tool

99. A Comparative Study of an Introductory Geography Course on ETV and in the Classroom

By Dr. Hildegard Binder Johnson, Macalester College, St. Paul, 1960. 19 pages.

This comparative study was prompted by a two-credit course in human geography given over KTCA the first semester of 1958-59, by Dr. Hildegard Binder Johnson. The study was designed to discover the teaching effectiveness and the learning retentiveness by teaching an introductory course in geography in the live classroom and over educational television, with findings concerning differences in techniques necessary for each situation.

The statistical analysis for this study was directed by Dr. Palmer O. Johnson.

This study, thus, is a comparative study of teaching by a very able and stimulating teacher in two different situations – the classroom and over television.

The course taught, Human Geography, was a three-credit course which could be counted toward the social science requirement in a liberal arts curriculum, required of students in elementary teacher training, and recommended for future teachers of the social sciences in secondary teaching. The course was developed through ten years of classroom teaching at Macalester. It was a lecture course of three hours weekly without laboratory or recitation sessions.

The course was topically arranged and dealt with the interrelationships between man and earth. Aside from a textbook, outside reading of standard literature, some current articles and selected short items from important recent publications was partly assigned and tested, partly suggested.

This course was offered over KTCA, the Twin City Area Educational Television, for two credits with two half-hour lectures weekly from September 15, 1958, to January 15, 1959.

The presentation of the course was somewhat adjusted by the teacher in that a large part of the material for the course was prepared during the summer.

Also, besides adjusting the course to students and a general audience, other adjustments were necessary. Each lecture had to be identified by a title for advance notices. The material had to be more carefully structured than any classroom lecture was. References to earlier lectures and corrections of earlier statements had to be avoided. Unlike

had to be self-contained even if the discussion of climate extended over four, or that of water resources over five evenings.

The need to weigh the merits and demerits of various teaching aids which one expects to use, the discovery that certain points should be illustrated and that no visual material was available entailed picture-taking for slides, writing for pictures, and searching for and experimenting with effective techniques of demonstration.

This course was not a closed-circuit television course. Therefore it could not be complemented with tests, quiz sessions, and bulletin boards. Contact with students was possible through letters, assignments, and worksheets. A specially prepared letter was sent every week to each student and individual letters from students and inquirers were personally answered. Worksheets were mailed every other week, corrected by the teacher and returned by mail to the students.

In comparing the best conditions of teaching on TV with the best classroom conditions, it was found that as much if not more material was covered in the two-credit TV course as in the three-credit classroom course.

This course was particularly difficult to produce on account of the great number of visual aids that are used in geography, such as maps, charts, globes, models, rock specimens. The most outstanding production problems included:

1. The entire production had to aspire to a professional quality and still be directed toward three types of viewers, day school students, mostly from Macalester College, students of the community at large, and the general audience.

2. The professor, who taught this course, was at first somewhat reluctant to teach an academic course, designed for the classroom, over TV.

3. The program had to be teacher-centered.

4. The professor likely was not given release time commensurate with the time that had to be devoted to preparation, performances, correction of papers, and correspondence.

5. It was assumed that the visualization of ideas, data, distributions and processes, often by practical demonstrations and not only by two-dimensional static media would be the most effective method of teaching Human Geography over television. Whenever possible the instructor substituted visual presentation for verbal delivery.

6. Sound methods of comparing classroom with TV teaching demanded administering of pretests and retention tests and careful practices in office management.

7. The program had to provide total instruction every time.

For a relative measure of the retention level of the different classes, the two groups of students, section B of the day class and the TV class, were compared.

FINDINGS:

Students in all three classes did significantly better at the end of the course than at the beginning.

Students in the TV class and in section B of the day class answered almost the same number of questions after a three-month interval that they had answered previously in the final test.

Whether taught by TV or in the classroom, achievement according to ability levels followed the usual pattern of students with higher ability learning more than those with lower ability.

Students in both sections of the day class achieved a higher mean score than the students in the TV class.

—GERALDINE JOHNSON

NAEB Research Fact Sheets

Series IV: Audience Studies

40. Listening Habits and Program Preferences of Television Viewers

By Howard E. Hopf, with the assistance of Raymond T. Bedwell, Jr., Ohio State University, November 1959. 10 pages.

This study is the second part of a report on radio and television listeners in Columbus, Ohio, during April, 1959.

A combination of the personal interview and questionnaire methods was used. A sample of 1,350 homes in Columbus and the city's residential suburbs was selected for the survey. General family information was secured in each home; 2,510 adults (over 19 years of age) and 699 children and teenagers (between 10 and 19 years of age) returned usable personal information.

Questionnaire forms were left at each home to be filled out by each member of the family group over 10 years of age, in addition to a special form to be filled out by the housewife and which related primarily to availability of children under 10 years of age at various hours during the day.

Columbus, Ohio, is primarily an industrial city, but one with a larger proportion of high or moderately high income families than in most cities of its size. In addition to being the capital of the state, it is the seat of two universities. There are seven standard-band radio stations in the city – one of them a noncommercial educational station—and three commercial TV stations, in addition to a University-owned noncommercial UHF television station. (Television Magazine's Annual Data Book for 1959 estimates that nearly 90 per cent of all homes in the standard metropolitan area are equipped with television sets. Of the 1,154 Columbus homes which constituted the sample used in the study reported in these pages, 90.3 per cent had television sets, and 24.6 per cent had two or more television sets.)

To a considerable extent, television listening or viewing was carried on on a family rather than an individual basis. The program watched or listened to by the adult members of the family group was often selected by children or teenagers. (As a result, the composition of the family group assumes a somewhat greater significance in relation to television than is the case with radio listening.)

The 1,154 family groups were divided into groups on the basis of the age of the housewife—the four most important of which were those in which housewives were in the age group from 20 to 35,

from 26 to 40, from 41 to 55, and from 56 to 70.

Another index to the relative importance of families with housewives in various age groups is provided by annual family incomes reported. From the standpoint of the advertiser with goods and services to sell, the family groups of greatest importance would seem to be those in which housewives are in the age brackets of 26 to 40 and 41 to 55.

The first group includes nearly 70 per cent of all children under 10 years of age, and consequently has the greatest need to buy—along with a reasonable amount of buying power; the second group, with housewives from 41 to 55 years of age, has the highest average annual family income, and provides the most important market for luxury and semi-luxury goods.

At every hour of the day, the number of women who were at home and available to listen was substantially greater than the number of men available during the same hour, and similarly that at every hour, the number of listeners over 40 years of age who were available was greater than the number of adult listeners from 19 to 40 years of age. During daylight hours, substantial numbers of preschool-age children were available.

At every hour, the number of men available was substantially greater than the number of teenagers and of children 10 to 13 years of age combined—although, of course, only a fraction of the number of women at home were awake at the same hour.

Total time devoted to television listening or viewing per day (Monday through Friday) for all men and boys over 10 years of age averaged 2.53 hours; for men 19 to 70, 2.40 hours.

Daily television listening or viewing by all women and girls over 10 years of age averaged 3.61 hours; by women 19 to 70 years of age, 3.92 hours.

Nearly 80 per cent of the adults from whom information was secured reported regular or fairly regular listening to some television news program; some 30 per cent of the men and 38 per cent of the women stated that they preferred to get national and local news from television, as compared with newspapers and radio.

The amount of formal education enjoyed by listeners and the family income status apparently have an even greater influence on use of television news and preference for television over other sources for national and local news, than has the age of the adult listener.

There was a regular progression upward or downward in the proportions of listeners who liked a given type of program in only a few cases. Considering general directions of changes in popularity, however, it is evident that certain types of programs are much more popular with younger than with older listeners; that other types apparently have more attraction for older than for younger men and women, and that still other types attain their highest level of popularity among middle-aged listeners.

The proportions of listeners who liked a particular type of program was influenced not only by the age of the listeners, but by such factors as sex, educational status, and family income.

Men, for instance, showed greater preferences than women for adult Westerns, for play-by-play sports broadcasts, for police and detective drama and for adventure drama, and somewhat greater preferences for jazz, detective programs, comedy variety, and out-of-home comedy drama.

—GERALDINE JOHNSON

NAEB Research Field Reports

Series IV: Audience Studies

42. Educational Television Project, Preliminary Report Number One

By Marshall N. Goldstein, Walter T. Martin, John R. Shepherd, University of Oregon, February, 1960. 43 pages.

On July 1, 1959, a three-year research program was begun under the auspices of the Institute of Community Studies of the University of Oregon. The study was launched to investigate the nature and sources of resistance to the use of TV for educational purposes.

The site chosen for the study was Eugene, Oregon. Earlier this locale had been rejected because: 1) it was feared that, due to the presence of the University there, the population had been over-interviewed; 2) KOAC-TV (station used in the study) viewing was only possible, in most instances, through the use of a relatively costly coaxial cable connection, thus resulting in sample bias.

The television cable in Eugene (also Springfield) offered a splendid research situation, however, in which the reception variable is relatively standard for all cable subscribers.

Each household connected to the cable receives the commercial station located in Eugene, the ETV channel in Corvallis, and three commercial stations in Portland. Among cable subscribers ETV viewing behavior would have to be explained by the social and psychological factors toward which the study was oriented.

The fact that a sample of cable subscribers would not be representative of all television viewers in these communities placed limitations on the study.

One advantage of the cable, however, was that the 1,500 cable users were selected through the cable billings to the subscribers, and the interviewing was scheduled to begin. In order to ascertain objectivity in the interviewing, one of the project staff drew a sample from among all those not interviewed through the billings. There was very little difference between those members of the sample who were interviewed by the survey organization and those who were omitted because of their initial refusal or unavailability.

The question "in what way does the sampling universe (all cable subscribers in the Eugene-Springfield area) differ, if at all, from the general population of television viewers (cable and non-cable) of

the area?" remains to be answered.

It is not possible to explain away the atypicality of the cable-subscribing television viewers: They are wealthier and better educated. However, survey findings have general value in explaining and understanding television behavior. That is, in similar studies carried out with different populations, the magnitude of the relationship or the absolute proportion of the sample doing one thing or another would probably vary, but the fact that a relationship existed would still hold true.

Three individual measures of KOAC-TV viewing were incorporated into a questionnaire. Combining all three measures yielded a six-way breakdown of utilization. At the one extreme were those who said they watched regularly or occasionally (measure 1) and who also reported in measure 2 that they watched three or more KOAC-TV programs during the preceding week. At the other end were those who did not watch any half-hour units during the preceding week and also maintained that they had not heard of the station and its programs or could not receive its signal.

Considering the utilization categories and the evaluation categories simultaneously produces twelve types of response to KOAC-TV. For each utilization rank there is both a favorable and not favorable (neutral and hostile combined) evaluation.

Four factors are strongly related to educational television. They are: (1) the educational attainment of the viewer, (2) his social class; (3) his participation in the organized activities of his community and (4) the degree to which he pursues such other avenues of "high-brow" communication as music, literature, and lectures. These four factors relate to the resistance of educational television viewing.

The most highly educated people in the study's sample—those with some post-graduate work or professional training—have the highest proportion of viewers and of potential fans among their number. The less educated are the more resistant to educational television broadcast over KOAC-TV.

Further study among educational television viewers revealed that there are more accepters among professionals than among proprietors, managers, and officials, and more accepters among these businessmen than among their lower white-collar employees. Surprisingly, there are more viewers among the blue-collar workers than among any other group except the professionals.

Community participation also affects educational television viewers. The proportion of people giving more than twenty hours a week to television viewing in general does gradually but steadily decline as the number of organizations to which they belong increases.

On the other hand, there is no noticeable increase in the percentage of KOAC-TV viewers as the number of memberships increases, except for those who joined six or more associations. There was a sudden jump in KOAC-TV viewing among those most dedicated joiners rather than the decline in KOAC-TV viewing, to be expected if time alone were the consideration.

Four factors have been examined and shown to be directly related to resistance to educational TV programs. The resister can be characterized as a person (1) lacking a college education; (2) employed in a lower status occupation, except that he is not a blue-collar worker; (3) more or less isolated from the voluntarily organized life

in his community and (4) not actively interested in cultural pursuits as books and music. Whether an accepter is actually a viewer or only potentially a fan seems to be a matter of the amount of time he has at his disposal.

Another revealing fact is that KOAC-TV has only half as many viewers among people living in large families of three or more persons as among people who live by themselves. Though desire to view KOAC-TV does not change with family size, active viewing does become considerably reduced in the larger families. The family environment affects the chances of a potential fan ever becoming a viewer, but does not relate to resistance to educational television.

Also, the study shows that people under 25 years of age are the most resistant of any age group. Those over 65 years of age are atypical in that they watch a great deal of both educational and commercial television.

CONCLUSION:

It is the person who is both flexible and capable not only of making up his own mind but of influencing others, who is fairly well educated and has a respected occupation who is the least resistant to educational television, as well as the most receptive to other forms of culture and education. But this form of composite portrait, which accumulates a number of characteristics that so far as we know from the descriptive investigation might well be unrelated to one another provides only the first glimpse or introduction to resistance and educational television.

—Gwealdeene Johnson

Copies of back numbers of the NAEB Research Fact Sheets are available for $2.50 per year. Notebooks containing all Fact Sheets for the seven years 1955-61 are available for $15.

NAEB Research Fact Sheets

Series VI: Impact

18. A Survey Measuring the Impact of Educational Television Programs Upon the Community of Ithaca, New York

By Frank W. Kolmin and Theodore Kavanau, Ithaca College, February 19, 1959. 9 pages. (NAEB Research Grant-in-Aid.)

This survey was carried out to help determine: which areas in economics, finance, and business administration were of greatest interest to the viewing audience; at what academic level presentations should be made in order to secure the greatest possible audience and, at the same time, be of educational value; which manner of presentation would prove most effective and would create the strongest impression on the viewers.

The program chosen for this survey was the "Economic Picture," produced weekly by the department of economics and business in co-operation with the department of television and radio at Ithaca College. This program could be viewed each Wednesday night from 8-8:30 p.m. during the 1959 school year.

The programs were presented through Ithaca College TV, operating on Channel 2 of the Cable System. Potential individual viewers numbered about 15,000.

The contents of the programs in this series were designed to give the viewers a wide variety of information covering as many phases of economic life as possible. Included were presentations by prominent local business leaders, accountants, attorneys and educators.

Some of the programs were:

Federal Income Taxes
Our Federal Reserve System
Business Men's Forum
Wage-Push or Demand-Pull
Economic Growth Without Inflation
A Primer in Public Finance: Our City of Ithaca
Economic Round-Up: Where Do We Stand To-Day?, etc.

The presentation techniques included:

1--Straight lecture
2--Ad-lib Office Scenes
3--Opening dramatization and then ad-lib
4--Question and answers of the reporter variety
5--Discussion and panels led by moderator.

A two-part survey was undertaken. Part one was a quantitative study to find out approximately how many viewers watched the

Economic Picture on any one selected evening. Part two was a depth investigation of a selection of viewers, searching for opinions of the programs.

CONCLUSIONS:

1. For the purpose of Educational TV, in the areas of Economics and Business—with which the survey was concerned—it is best to keep the subject matter tied as closely as possible to the experience and personal interest of the average viewer.

2. The academic level of the presentations were conflictingly received, depending upon the educational background of the viewers. College viewers found the content of the programs rather basic and its presentation not scholarly enough. The nonacademic listeners, however, asked for presentations of more "practical" application.

3. Because of the wide differentials in education, concentrative abilities and viewer interest followed no general pattern. It did appear that all viewers enjoyed at least occasional dramatization of the subject as long as the clarity of the presentation was not impaired.

—GERALDINE JOHNSON

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The NAEB began 35 years ago, as a loosely knit organization of a few pioneers in educational broadcasting. As the only professional or trade association in the field, throughout the years it has worked to improve the professional status of the educational broadcaster—and the quality of educational programing. Nine years ago, members established a tape distribution network for educational radio. This self-supporting network today supplies over a hundred educational radio stations with ten hours of programing a week, programs from foreign as well as domestic sources.